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**To:** mlpacommments@resources.ca.gov  
**Subject:** MLPAComments: FW: MPA News Vol. 7, No. 8 (March 2006)

Hello BRTF members and staff,

I thought you might be interested in the latest issue of MPA News, which is in text form below and attached. I've also included the latest PPIC poll data, if you have not yet seen it. Thanks for all your continuing hard work, and best of luck next week.

--Kate

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**To:** mpanews@u.washington.edu  
**Subject:** MPA News Vol. 7, No. 8 (March 2006)

Dear MPA News subscriber:

The electronic version of MPA News Vol. 7, No. 8, is attached as a PDF file and also appears below in plain text.

Sincerely,  
John B. Davis  
Editor

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## Use of Volunteers in MPA Management: Opportunities, Challenges, and Advice

Budgetary shortfalls are a chronic challenge for MPA managers worldwide. It is rare for a MPA to have the funds to pay for all the equipment, material support, and personnel it needs to fulfill its purpose. To meet management goals within financial constraints, the use of volunteers can be invaluable. Many MPAs have set up formal programs to recruit, train, and retain volunteers for a wide array of projects — resource monitoring, enforcement, facility maintenance, and more.

But the management of volunteers can also present challenges, including the time required to train and oversee these personnel, which can be substantial in some cases. This month, *MPA News* examines how several MPA practitioners have set up volunteer programs in diverse sites, and what they have learned from their experiences.

### Establishing volunteer programs for a national MPA system

When you visit the website for the Florida Keys National Marine Sanctuary in the USA (<http://www.fknms.nos.noaa.gov>), the homepage offers a link for “Volunteer Opportunities”. Click on that link and you are provided a list of initiatives with needs for volunteer assistance: cleaning reefs, monitoring coral bleaching, testing water quality, restoring conch populations, and more. Information on how to contact each initiative and get involved is readily available.

Mary Enstrom is largely responsible for this. In 1992, she was hired by the sanctuary and by The Nature Conservancy, a NGO, to design and implement a volunteer program for the 9600-km<sup>2</sup> Florida Keys site. This MPA became the first within the National Marine Sanctuaries Program (NMSP) to include a volunteer action plan as a chapter within its management plan. Based on her success in the Florida Keys, Enstrom contracted with NMSP to help develop volunteer management programs for all 13 national marine sanctuaries across the nation, a task completed in 2005. Tools developed for the sanctuaries include a handbook for volunteers, safety manuals, tip sheets for supervisors, and inventories of existing and recommended volunteer projects. Information on each volunteer is entered into

a national database for tracking purposes, and staffers at each site have been trained in volunteer management.

Enstrom says the benefits of recruiting volunteers — and hiring staff to supervise them — are many. “A manager is always able to achieve more once an established volunteer program is up and running,” she says. “Furthermore, operating a volunteer program reduces the cost of monitoring a MPA and reflects to the public that the MPA cares about them and their needs.” It can also lead to funding opportunities, she says. “Governments love to see community involvement and will thus be more likely to provide funding. In addition, citizens who are actively engaged with an organization or government agency will often give more in donations to that group than will those who are not involved.”

Enstrom acknowledges there can be costs as well to managing volunteers, including the time necessary for training and supervision. It is not unusual, she says, for a manager who is already overextended with responsibilities to say that the trouble of adding volunteers would outweigh the benefits. “When a manager says this, I have two responses,” she says. “One, you should not start a volunteer program if you don’t fully support the idea of involving the community in protecting the MPA. Public involvement is a reality for the future of our MPAs. Two, the manager needs to understand how community involvement could help the MPA. In this time of budget constraints, the public can be your best advocates for an adequate budget if they see the value of the site.”

For MPA managers who are considering establishing a volunteer program for their sites, Enstrom advises them to embrace the concept. “Convene a meeting of all agencies and NGOs in your community to discuss the reality of starting a new volunteer program or adding to an existing one,” she says. There are experts out there, she says, to assist in the development. “There are many volunteer program consultants in the world,” she says. “Paying someone to facilitate that meeting for the manager would be worth the cost: an outside consultant is not invested in any of the current programs.” She adds that consultants can also be asked to write an action plan for implementing a MPA volunteer program.

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## Chumbe Island, Zanzibar: Attracting volunteers from nearby and worldwide

At Chumbe Island Coral Park, located 13 km southwest of Zanzibar, Tanzania, the help of volunteers has become an essential part of operations. Run on a tight budget by a small, private not-for-profit company, the park works to minimize costs while pursuing the goal of sustainable development through ecotourism-supported conservation and education. An average of 10-20 volunteers per year — from Tanzania and far-away nations — have served in an array of activities, geared to take advantage of the strengths of each individual.

The volunteer jobs have ranged from specialized assignments of a couple days in length, to ecological baseline surveys, nature trail development and maintenance, staff training, production of education materials, and management support for several months or even years. Management has sometimes coordinated with international volunteer agencies (e.g., Germany's Senior Expert Service, the UK's British Executive Service Overseas) to recruit experts on specific matters like solar voltaics, boatbuilding, graywater filtration, and rat eradication. But many of the volunteer arrangements are fortuitous, driven by the initiative and flexibility of volunteers themselves. An American woman, Molly, visited Chumbe for a day trip in 2004 and ended up volunteering as an administrative assistant for eight months. In 1999, when the park had an urgent need for temporary island managers, the project manager conducted a search for suitable candidates among tourists in Zanzibar, finding an enthusiastic Canadian couple who seized the opportunity and moved to Chumbe within days. They spent half a year there.

"Volunteers are very enthusiastic and usually have a lot of initiative," says Helen Peek, project manager for the park. "Many of the volunteers have decided that they want to work in the area of conservation or ecotourism in Zanzibar and contact us directly, using information from the internet." For housing arrangements, the company can accommodate volunteers in its office building in Zanzibar town (off the island) and in the manager's house on Chumbe; some also reside with friends.

Notably, Chumbe management does not advertise the need for volunteers on its website, <http://www.chumbeisland.com>. Says Sibylle Riedmiller, project director, "At this point, we don't need to advertise volunteer jobs. We're getting more applications than we can accommodate all the time."

On the challenges of supervising these volunteers, Peek says that although briefing and supervision of new volunteers can be time-consuming, it is the longer-term volunteers who require more work by administrators. The reason: work permits. "When we have international volunteers for less than three months, they come on a tourist visa, which minimizes administration for us," she says. "However, volunteers who stay for longer

have a lengthy immigration process that I have to organize and process. Recently I had a Ugandan intern for whom I had to get separate permission from the Commission of Tourism before I could apply for his immigration status of student. After his internship we offered him a job, and the resulting process of changing his immigration status took nearly a month of form-filling and visits to immigration — very expensive." In some cases, volunteers badly needed by Chumbe have been turned down by immigration officials for their work permits.

Although most volunteers arrive at Chumbe ready to get to work, Peek says some come with misunderstandings over job descriptions or priorities. "This usually happens with international volunteers rather than national," she says. The remote location leads some internationals to expect a Robinson Crusoe-like paradise — perhaps why some of them first dream of volunteering there — but find only part of this true. Peek adds, "There can also be challenges caused by cultural differences, such as appropriate dresswear in a Muslim society or communication problems because of language and attitude. These can be overcome by better preparation from the volunteer and guidance from the company."

A "volunteer mentality" involves a person being flexible and open to living in a local manner rather than an expatriate lifestyle, says Peek. "Supervision really depends on the volunteers. If they have had African experience before and are clear with their objectives, they are usually very self-reliant."

## The Seaflower MPA, Colombia: Using volunteers to build community support

Colombia's San Andrés Archipelago in the southwest Caribbean is a UNESCO biosphere reserve. Within it is the multiple-use Seaflower MPA, which covers 65,000 km<sup>2</sup>. Overseen by CORALINA, a regional Colombian government agency that manages natural resources and sustainable development of the archipelago, the MPA was mapped and zoned through a four-year, cooperative process involving local stakeholder groups (*MPA News* 6:10).

Marion Howard is former coordinator of the MPA project of CORALINA and now a MPA advisor to the agency. "Stakeholders share responsibility for managing the MPA with CORALINA, so volunteers are involved in many ways," says Howard. "Our volunteer programs can be loosely categorized as formal and informal. The formal programs are quite structured, with defined relationships, substantial training, and agreements signed between volunteers and CORALINA to formalize responsibilities on both sides." One of the most important formal programs, she says, is the MPA Stakeholder Advisory Committee (SAC), made up of invited volunteers from primary user groups: artisanal fishers, professional divers, other water sports, marinas, the tourist sector, and traditional users (the indigenous

community). The SAC is consulted on all aspects of MPA management. Other formal programs include volunteer inspectors, who conduct surveillance of the MPA, and a mooring buoy program that involves siting, installation, and maintenance of buoys by volunteers.

Community-based monitoring in the MPA, including monitoring of coral health, fish, sea turtles, and beaches, is a less-formal volunteer program, says Howard.

“Monitoring programs are open to everyone (CORALINA finances dive courses for interested people who cannot afford training). More people are trained, participation is flexible, and networks are less structured,” she says. “Volunteers also support research — working with scientists, for example, on baseline ecological studies, household surveys, and identification of spawning aggregation sites. Because poverty is widespread and the archipelago has very high unemployment (over 50%), knowledgeable stakeholders like artisanal fishers are also hired to help with research when funding is available.” The most informal volunteer programs, Howard says, include events like beach clean-ups and information campaigns and are open to the entire community.

Nearly all CORALINA volunteers come from the archipelago. The exceptions are graduate students who participate in ongoing research projects, divers from the mainland who engage in annual marine clean-ups, and a number of international marine scientists and MPA experts who serve on an International Advisory Board (*MPA News* 5:2). “Since all of our work is participatory, CORALINA maintains strong ongoing relationships with local NGOs, the private sector, schools, churches, and neighborhoods — all of which provide volunteers,” says Howard.

The volunteer-based linkages between the Seaflower MPA and the community provide great benefits for management, says Elizabeth Taylor, CORALINA general director. “The SAC is essential for effective management,” she says. “These volunteers keep in close contact with other users and are the strongest link between CORALINA and the people who work in the MPA. They share information openly with management and take information back to the community. The Seaflower is a very large MPA, so managers and staff can’t stay informed about what is going on there on a day-to-day basis without maintaining close ties to users.”

Involving the community in a wide array of MPA activities also generates overall support for the MPA, says Taylor. “As volunteers learn more about marine conservation and management, they in turn become informal educators, raising awareness throughout the community,” she says. “In addition, the volunteer programs promote transparency in MPA management and provide a mechanism for the community to share responsibility for MPA effectiveness with CORALINA.”

Challenges for the volunteer programs include the region’s poverty — which makes it difficult for people

to commit themselves to volunteer work — and the fact that, historically, volunteerism has not been part of the local culture. Howard says, “It was particularly unheard of to volunteer with government. Government was not trusted and did not communicate with the public, and corruption was widespread, so the custom was to keep out of the way of authorities.”

These and other factors combine to mean that the same people tend to get involved in community affairs, including being the most committed volunteers, says Howard. “These people can get spread too thin. Reaching new people and getting them involved in the MPA on an ongoing basis requires the development of a new environmental consciousness through constant outreach and communication with stakeholders,” she says.

### **Edmonds Underwater Park, USA: Management by volunteers**

For nearly 30 years, Bruce Higgins has coordinated the volunteer program at tiny Edmonds Underwater Park in Edmonds, Washington, USA. Overseeing dozens of volunteers per year at an annual program-wide average of 1500 hours of volunteer time, Higgins has not been paid a dollar. He is a volunteer himself.

The municipally owned Edmonds Underwater Park — located a few miles north of Seattle and measuring just 0.1 km<sup>2</sup> in area — attracts 20,000 dive visitors per year with its assortment of man-made reef structures (e.g., sunken vessels, a dry dock, milk crates, piles of rocks) and the marine life these items nurture, including some of the largest lingcod in Puget Sound and more than 100 lingcod nests. Viewed by some as an unnatural oddity for its abundance of infrastructure — including a three-mile system of rope trails and markers to aid diver navigation in the sometimes murky water — the no-take park has nonetheless gained a measure of international recognition for the size and abundance of some fish species within its boundaries. Much of the recreational and ecological features of the park owe to the work of volunteers since 1977, when Higgins took charge of coordinating volunteer efforts, including placement of the sunken structures.

“The protected status for the park took effect around 1970, and I first started diving it in 1974,” says Higgins. “The no-harvest protection already provided more diversity compared to other Puget Sound sites that did not have such protection. My involvement came out of the need to manage conflicting user groups in the park — boaters vs. divers. I coordinated the placement of buoys to keep boaters away from divers and to better define the unique protected area. Projects just grew from there.”

Higgins does not have a formal title with the City of Edmonds, which owns and manages the park. The city treats him as a park user who happens to share the city’s

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value system for the area — namely that the site should be managed for recreational and biological purposes. The city oversees management of facilities on-site including restrooms, a shower station, parking lot, and signage, and provides public safety services (police, first aid, etc.). The volunteers, coordinated by Higgins, maintain the existing underwater infrastructure, lay new “enhancement” structures (with city permission), inspect wear on the marker buoy system, and carry out various other activities as needed. “Each year we try to install one diver-scaled feature, like a wooden hull that was placed in 1999,” he says. “Since this is a [recreational] park as well as a protected area, we blend our projects to support marine life and diver interest.”

The level of volunteer support has varied over time, says Higgins, but can be grouped into two camps. “There are about 10 individuals who commit to a schedule that involves monthly or more frequent dives during the year, and they provide much of the horsepower to get things done. The second group of individuals, numbering about 50 a year, help less frequently and typically just show up a couple times,” he says. Higgins hosts work dives each Saturday, no matter the weather. Over the course of a year, the average is about 2.5 divers per work dive, with 156 dives per year.

The consistent Saturday schedule aids in attracting a steady supply of volunteers, he says: divers know they can show up on any Saturday and volunteer. He adds that a simple set of priorities established by the park’s

volunteers — i.e., safety, security, maintenance, and improvement — serves to attract like-minded individuals. In addition, rewards for participation kick in after a few dives when volunteers see the response to their efforts, with marine life moving in on newly placed features and users commenting on how the volunteers’ effort is appreciated.

Over the long term, a danger of volunteerism is burnout — when a volunteer tires from devoting so much of his or her energy and time to a cause with no financial payback. Higgins says this has not been a problem for himself. “Avoiding burnout has been very easy,” he says. “The needs of the park have evolved over time, and so our chores in fulfilling our priorities have changed.” There are new projects (including a recent initiative to combat an invasive tunicate species in the park), constant variation in weather and tides, and new volunteers with different skill sets, he says.

In the three decades since assuming his position, and showing up 52 weekends per year, Higgins has become an institution at the park. What will happen when he is no longer able to do what he does? “My hope is that someone with a similar attitude will elect to invest and connect with the City of Edmonds,” he says. No one is in place yet to take that role. “The decision to be a partner is not something that occurs overnight,” he says. “The pattern and value system represented by the priority list will exist, and if someone elects to take it on, it will be ‘their’ turn.” 

## Dependence on volunteer, low-wage labor can have downsides

Over-reliance on the use of unpaid or underpaid labor in natural resource management — particularly full-time volunteers and interns — can be unfair to these workers, according to Darroch Whitaker, a postdoctoral fellow in biology at Acadia University, Canada. In a paper published in the journal *Conservation Biology* in 2003, Whitaker argued that providing less than a minimum wage to full-time workers causes undue personal hardship to these personnel, and excludes potentially valuable individuals from lower economic classes who cannot afford to work for low, or no, wages.

“The use of volunteers, which can be a great thing if done with due consideration, can become problematic when reliance on them becomes engrained in the professional culture,” Whitaker told *MPA News*. “We conservationists often complain about being underfunded, and of course this is quite often true, but we become our own worst enemies when we

grow complacent and stop asking for or expecting legitimate wages for our employees. In doing so, we fail to convey the true cost of conservation to policy makers and governments, and may exclude people from less privileged economic backgrounds from our profession. Both of these factors will impede conservation in the long term.”

Whitaker’s article in *Conservation Biology* (“The Use of Full-Time Volunteers and Interns by Natural-Resource Professionals”, Vol. 17, No. 1, pp. 330-333) is available online in PDF format at [http://www.earthscience.org/r2/ES14744/scb17-1\\_whd01/scb17-1\\_whd01.pdf](http://www.earthscience.org/r2/ES14744/scb17-1_whd01/scb17-1_whd01.pdf).

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# MPA Perspective Managing Recreational Fishing in MPAs through Vertical Zoning: The Importance of Understanding Benthic-Pelagic Linkages

By Charles Wahle, Rikki Grober-Dunsmore, and Lisa Wooninck

Policy-makers and stakeholders increasingly demand that new MPAs have clearly articulated conservation objectives and that user restrictions be demonstrably linked to significant environmental threats. These concerns are often reflected in disputes over whether a proposed MPA must be a no-take reserve to be truly effective, or whether recreational fishing for pelagic species could be permitted without compromising the integrity of the underlying benthic communities — often the primary target of MPA protections.

In such situations, managing recreational fishing through “vertical zoning” that restricts fishing to the MPA’s upper waters might represent a practical way to facilitate existing uses consistent with the site’s primary conservation goals. Clearly, the advisability of this management strategy depends on the scope of the MPA’s conservation objectives (i.e., benthic communities vs. the entire water column), the degree to which its benthic and pelagic communities are linked ecologically and vulnerable to fishing, and the MPA’s ability to monitor and enforce complex fishing restrictions.

To date, the answer to this timely question has been in the eye of the beholder. Without a more transparent scientific basis for evaluating potential threats posed by common activities such as recreational fishing, MPAs will continue to spark opposition from user groups that question their underlying ecological rationale and equitability. In November 2005, the US National Marine Protected Areas Center convened 30 fisheries scientists, marine ecologists, MPA practitioners, and key recreational fishing leaders in Monterey, California, to address this increasingly critical issue. The purpose of this diverse gathering was to synthesize what is currently known about benthic-pelagic (BP) linkages in US marine ecosystems, to identify significant gaps in our scientific understanding of BP linkages, and to lay the preliminary groundwork for practical guidelines and best practices for managing recreational fishing in MPAs.

## Benthic-Pelagic Linkages in Marine Ecosystems – General Trends

The workshop participants synthesized current knowledge about the strength, direction and complexity of benthic-pelagic linkages among different taxa and ecosystems. While local BP linkages will differ, three important general trends emerged from the group:

- First, BP linkages can generally be expected to be stronger and more direct in shallow water habitats (i.e., seafloors 50-100m deep); among coastal pelagic fish species (e.g. jacks, mackerel, bluefish); in predictable spawning

aggregations that feed heavily on the benthos; in upwelling zones and other areas of localized biophysical coupling; and in habitats with pronounced three-dimensional relief (e.g., coral reefs, shallow sea mounts, kelp beds).


- Second, BP linkages may be generally weaker and more indirect in deeper habitats where pelagic predators rarely encounter benthic prey and among oceanic pelagic species (e.g., tuna, sharks, marlin).
- Third, there are many circumstances in which ecologically important interactions are likely to be complex, unpredictable, and/or poorly understood. Local ecological factors contributing to complex BP linkages include multiple interactions within and among trophic levels (e.g., with mid-water forage or bait fish); complex behaviors and life histories among key local species; the ephemeral appearance of highly mobile predators; and/or the size of pelagic predator populations.

Thus, while the extreme ends of the BP linkages spectrum are relatively straightforward and intuitive, the vast ecological center is considerably less clear for designers of future MPAs.

## Implications of Benthic-Pelagic Linkages for MPA Design

Based on these general ecological trends in the potential occurrence and importance of BP linkages, the workshop participants agreed on some preliminary rules of thumb to help guide MPA planners when evaluating proposals to allow pelagic recreational fishing in an MPA. Vertical zoning of fishing might be appropriate to consider in areas with weak and indirect BP linkages, where pelagic fishing may not impact protected benthic communities. In contrast, vertical zoning might not be an appropriate management design in areas with strong and direct BP linkages, where pelagic fish prey heavily upon benthic or mid-water species. Finally, for the many areas in which the nature, direction, strength, and predictability of the BP linkages are poorly understood, a more precautionary and adaptive approach to MPA design might be most appropriate to adopt, pending additional scientific information about the site.

## Next Steps

By identifying the general circumstances in which we may know enough to evaluate the advisability of using vertical zoning of fishing to design and manage benthic-focused MPAs, these scientists, fishermen and managers overcame significant differences in experience and perspective on an important and contentious marine policy issue. Ongoing follow-up actions include developing a more detailed scientific publication, organizing a scientific working group to address the emerging research needs on BP linkages, and working with the recreational fishing community to develop best practices for low impact pelagic fishing by, and for, fishermen. Ultimately, we hope that the workshop’s results, and the subsequent efforts that it has already spawned, will help inform a new direction of science-based collaboration in MPA policy deliberations in the United States and abroad. 

### Editor’s note:

The authors of this essay work with the National Marine Protected Areas Center of the USA, established in 2000 to provide science, information, and tools for an effective national system of MPAs (<http://www.mpa.gov>).

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# Letters to the Editor

## Ballantine's view on New Zealand MPA policy

### Dear *MPA News*:

As reported in the January 2006 issue of *MPA News* (7:7), the New Zealand government has issued a *Marine Protected Areas Policy and Implementation Plan*, available at [http://www.biodiversity.govt.nz/seas/biodiversity/protected/mpa\\_policy.html](http://www.biodiversity.govt.nz/seas/biodiversity/protected/mpa_policy.html). My views on it are below:

#### (A) The bad side

1. The document's Foreword states, "The aim is to have 10% of New Zealand's marine environment in some form of protection by 2010." This suggests that 90% of NZ's marine environment will have no form of protection by 2010 — ignoring the fact that all of NZ's seas have *some* form of protection *now* (e.g., no whaling, as well as a raft of fisheries controls).
2. Despite being based on the need for biodiversity protection, the policy still gives the Ministry of Fisheries a more-or-less equal partnership with the Department of Conservation, and generally assumes that only one or two examples of each habitat or ecosystem will be protected until there is evidence of actual or potential damage.
3. Lengthy delays could easily occur while classification of habitats/ecosystems/bioregions, etc. is agreed *and* the definitions of the protection standards are decided. Neither of these things will achieve total agreement or permanency — they are always going to be opinions.
4. The policy insists on a spectrum of levels of protection while ignoring the need to establish a sustainable system of highly protected marine reserves. Such reserves are the only practical way of ensuring the protection of marine biodiversity — much of which, as the policy states, has not even been described.

#### (B) The good side

1. The MPA policy is a step forward if we compare it to what we had before, which was, effectively, no policy.
2. The policy, at last, puts marine reserves on the official radar screen. Arguments in favor of more and better marine reserves now have some official standing.
3. It provides some noteworthy guidance on marine reserves. A summarizing brochure released with the policy, for example, includes the statement, "The government intends that at least one example of each habitat or ecosystem included in the MPA network will be protected by a marine reserve. Marine reserves will also be used to protect outstanding and rare sites."

The policy itself includes the statement, "Marine reserves will be used under the MPA Policy to contribute to the network via:

- a) Selection as the most appropriate tool(s) in the MPA planning process; and
- b) Selection to meet the government decision that marine reserves will be used to protect:
  - (i) representative examples of the full range of marine communities and ecosystems that are common or widespread;
  - (ii) outstanding, rare, distinctive, or internationally or nationally important marine communities or ecosystems; and
  - (iii) natural features that are part of the biological and physical processes of the marine communities and ecosystems referred to in (i) and (ii), in particular those natural features that are outstanding, rare, unique, beautiful, or important."

The above will probably be used to create a representative system of marine reserves, and could be used to develop a sustainable one.

### Bill Ballantine

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## Ethical argument for MPAs

### Dear *MPA News*:

I strongly support Bill Ballantine's statement of the rationale and principles behind MPAs ("A Marine Reserve Manifesto", *MPA News* 7:7). The oceans are experiencing a crisis driven by human impacts. Fishing, pollution, habitat damage, and the translocation of organisms have caused huge and increasing damage. Are these impacts wise or ethically right?

To quote the *National Strategy for the Conservation of Australia's Biological Diversity* 1996 (<http://www.deh.gov.au/biodiversity/publications/strategy/>): "There is in the community a view that the conservation of biological diversity also has an ethical basis. We share the earth with many other life forms which warrant our respect, whether or not they are of benefit to us. Earth belongs to the future as well as the present; no single species or generation can claim it as its own."

It is time that MPA experts and advocates begin using an ethical argument to support the creation of reserves: that we need to set aside large areas of the oceans simply to provide peaceful coexistence with ocean inhabitants. It is one thing to kill a fish and eat it. It is another to destroy ecosystems and their inhabitants. We share this planet; we don't own it.

### Jon Nevill

Director, OnlyOnePlanet Consulting, PO Box 106, Hampton, Victoria 3188, Australia. Tel: +61 422 926 515; E-mail: [jon\\_nevill@yahoo.com.au](mailto:jon_nevill@yahoo.com.au); Web: [www.ids.org.au/~cnevill/marine.htm](http://www.ids.org.au/~cnevill/marine.htm)

## Notes & News

### New Zealand proposes large no-trawl zone in EEZ

Deep-sea fishing industry leaders and the New Zealand government have proposed that a total of 1.2 million square kilometers of the nation's Exclusive Economic Zone (EEZ) be placed off-limits to bottom trawling and dredging. The network of closures would amount to nearly one-third of the nation's EEZ. NZ Fisheries Minister Jim Anderton anticipates having regulations in place to implement the proposed closures by 1 October 2006, following a period of public comment.

The proposed closures would extend from subantarctic waters south of Campbell Island to the subtropical Kermadec region, comprising a range of depths and habitats, including seamounts. "These areas have had little or no trawling or dredging in the past, so we expect their ecosystems and habitats are relatively intact," said Anderton in an official announcement, delivered to the first meeting of the South Pacific Regional Fisheries Management Organization (<http://www.progressive.org.nz/modules.php?name=News&file=article&sid=2202>).

WWF New Zealand, a conservation NGO, called the proposal "a bold initiative" that represented "long-range thinking about protection of seabed biodiversity", but added the organization would like to see inclusion of currently trawled areas in the closures to allow for recovery. Greenpeace, another NGO, expressed disappointment with the proposal, saying it included areas that were too deep to bottom-trawl anyway and fell short of Greenpeace's goal of an outright ban on use of such gear.

The closures would be the largest single marine protection measure ever proposed within a nation's EEZ, according to the NZ government. They would indeed be larger than the 950,000-km<sup>2</sup> trawl closure designated in August 2005 for the Aleutian Islands of Alaska, USA ("Huge Aleutian MPA approved", *MPA News* 7:3). They would be smaller than the 1.6 million-km<sup>2</sup> network of trawl closures designated in 2005 for the Mediterranean and Black Seas, which primarily comprises waters outside national jurisdictions ("Bottom trawling prohibited below 1000 meters in Mediterranean", *MPA News* 6:9).

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### Laffoley is named Vice Chair Marine of World Commission on Protected Areas

Dan Laffoley of English Nature, the UK's statutory advisory body for nature conservation in England, has been named Vice Chair Marine of the IUCN World Commission on Protected Areas (WCPA), replacing Bud Ehler in the post. For the past decade, Laffoley has headed the marine conservation program for English Nature, and has held organizational roles in major conservation initiatives with marine themes, including the World Parks Congress in 2003 and the First

International Marine Protected Areas Congress (IMPAC1), held in October 2005 in Geelong, Australia.

In a statement upon taking the Vice Chair position, Laffoley said, "We will need to continue to strengthen, globally and regionally, our efforts on putting in place individual MPAs as the backbone of our work. As IMPAC1 recently demonstrated, though, we need to move from sites to developing networks with an increased sense of urgency, and from poor underlying data to improved inventories that help identify priorities for future work and funding." He also indicated his desire to improve public education on MPAs, involve young people more effectively with MPA-related initiatives, encourage the use of MPAs as benchmarks of sustainable development, and deepen WCPA's engagement in discussions of marine climate change adaptation and mitigation. He anticipates developing a plan of action for the WCPA Marine theme in the coming year. Laffoley's statement is available on the WCPA Marine website at <http://congress.iucn.org/themes/wcpa/biome/marine/programme.htm>.

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### New regional network for Dutch Caribbean protected areas

Practitioners and conservationists have created a regional network of marine and terrestrial protected areas on the Dutch Caribbean islands of Aruba, Bonaire, Curaçao, Saba, St. Eustatius, and St. Maarten, with the goal of sharing a combined pool of knowledge and expertise on the protection of these areas. An "umbrella" NGO, the Dutch Caribbean Nature Alliance, has been formed to build capacity for the new network through programs including fundraising, staff training, and strategic planning. The DCNA website (<http://www.DCNAnature.org>) will make information gained from the network available to colleagues worldwide.

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### Report: Mapping human activities for MPA planning

A new report describes methods for collecting spatial data on human use patterns to inform local and regional MPA-planning processes. Produced by the (US) National Marine Protected Areas Center, the report summarizes the results of a workshop on this topic held in late 2005 in California. Workshop participants, including social scientists, geographers, and GIS specialists, discussed and identified data associated with human activities in the marine environment, and assessed the applicability of GIS for storing and analyzing these data. Ultimately, the findings of the workshop are intended to aid the planning of effective and equitable MPA sites and networks, and complement efforts to conduct ecosystem-based management. The report *Mapping Human Activity in the Marine Environment: GIS Tools and Participatory Methods* is available in PDF format at [http://www.mpa.gov/information\\_tools/pdf/hupi-workshopreport-fdraft.pdf](http://www.mpa.gov/information_tools/pdf/hupi-workshopreport-fdraft.pdf).

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### Report: Protection of reefs, mangroves is bargain

Coastal coral reefs and mangroves play an important role in shoreline protection during extreme weather events, and the cost of protecting such ecosystems — with MPAs or other management tools — amounts to a fraction of their estimated global value, according to a new report from the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). The report *In the Front Line: Shoreline Protection and other Ecosystem Services from Mangroves and Coral Reefs* estimates the average management cost of a marine protected area to be US\$775/km<sup>2</sup> — or less than 0.2% of the estimated global value of a square kilometer of coral reef or mangrove. (The estimated ecosystem values are based on the various services that reefs and mangroves provide, including shoreline protection, fisheries, tourism, and recreation.) The report discusses management of these ecosystems and the pros and cons of rehabilitating or restoring them following degradation. It is available online at [http://sea.unep-wcmc.org/resources/publications/UNEP\\_WCMC\\_bio\\_series/24.cfm](http://sea.unep-wcmc.org/resources/publications/UNEP_WCMC_bio_series/24.cfm).

### Report available from European MPA conference

A conference on the use and implementation of MPAs for fisheries management and biodiversity conservation, held in November 2005 at the European Parliament, has produced a report of the presentations and discussions that occurred. The conference was co-organized by IUCN and the European Bureau for Conservation & Development, and involved representatives from EU and non-EU state governments, the UN Food and Agriculture Organization, fishing industry, environ-

mental NGOs, and other institutions. The 28-page *Report of the Conference on Marine Biodiversity, Fisheries Management, and Marine Protected Areas (MPAs)* is available in PDF format at <http://www.ebcd.org/News/Report%2018-1-2006%20final.pdf>.

### Course to be held on Caribbean MPAs

Students, practitioners, and others interested in MPAs in the Caribbean region are invited to enroll in an international course to be held 17-25 June 2006 in Puerto Morelos, Quintana Roo, Mexico. Co-led by researchers from the National University of Mexico and Florida International University, the seven-day course “Marine Protected Areas for the South Florida, Mexican Caribbean, and Mesoamerican Region” will analyze ecological and socioeconomic aspects of MPA design and management. Registration is US\$350/person. For more information, e-mail Ligia Collado Vides at [colladol@fiu.edu](mailto:colladol@fiu.edu).

### Master's degree available in Marine Environmental Management

Starting October 2006, the University of York (UK) is offering a new master's degree program in Marine Environmental Management, aimed at those who want to pursue a career in marine conservation or marine resource management. Directed by biologist Callum Roberts, the course will feature instruction on design, implementation, and management of MPAs, among other issues. For more information, visit the program website at <http://www.york.ac.uk/depts/eeem/gsp/mem>.

## Question: In what cases will no-take marine reserves be ineffective as a management tool?

Tim McClanahan, a marine biologist in Kenya for the Wildlife Conservation Society, has studied how various resource management tools — including but not limited to no-take marine reserves — can best be applied to different ecological, socioeconomic, and political situations. A study he co-authored with Eric Verheij and Joseph Maina in the January 2006 issue of the journal *Aquatic Conservation* compares the management effectiveness of a no-take marine park in Kenya with a multiple-use collaborative fisheries management area located in adjacent waters in Tanzania. It concludes that collaborative fisheries and large permanent closed areas have different attributes that, when combined, “can achieve multiple purposes of sustainable fisheries, ecosystem functions, and protection of fishing-sensitive species.”

*MPA News* asked McClanahan whether there were some situations in which permanently closed areas would simply not work as an effective management tool. Below is his response.

**McClanahan:** “Permanently closed MPAs are always a necessary part of marine management. But the likelihood that they will succeed is not very high at two ends of the political spectrum: namely, complete control of resources by local communities, and repressive top-down control by central governments. In the former case, the local communities will seldom agree to large and permanent closed areas that may jeopardize their local control of

resources. In the latter, people will be antagonistic and devious, and will find ways to bypass laws and enforcement.

“Local control is more likely to lead to smaller and less permanent systems of closure. Repressive top-down control will need to insure that the economy is functioning well-enough that resource users have other options for survival and will not need to risk the consequences of bypassing strict laws. Moderate political systems that balance national and local needs are likely to be able to create and successfully enforce permanent closures.”

### For more information

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# **PPIC STATEWIDE SURVEY**

FEBRUARY 2006

**Californians and the Environment**  
*in collaboration with*  
**The David and Lucile Packard Foundation**

.....

**Mark Baldassare**  
Research Director & Survey Director

**Public  
Policy  
Institute of  
California**

The Public Policy Institute of California (PPIC) is a private operating foundation established in 1994 with an endowment from William R. Hewlett. The Institute is dedicated to improving public policy in California through independent, objective, nonpartisan research.

PPIC's research agenda focuses on three program areas: population, economy, and governance and public finance. Studies within these programs are examining the underlying forces shaping California's future, cutting across a wide range of public policy concerns, including education, health care, immigration, income distribution, welfare, urban growth, and state and local finance.

PPIC was created because three concerned citizens – William R. Hewlett, Roger W. Heyns, and Arjay Miller – recognized the need for linking objective research to the realities of California public policy. Their goal was to help the state's leaders better understand the intricacies and implications of contemporary issues and make informed public policy decisions when confronted with challenges in the future. PPIC does not take or support positions on any ballot measure or on any local, state, or federal legislation, nor does it endorse, support, or oppose any political parties or candidates for public office.

David W. Lyon is founding President and Chief Executive Officer of PPIC. Thomas C. Sutton is Chair of the Board of Directors.

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## Preface

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The PPIC Statewide Survey series provides policymakers, the media, and the general public with objective, advocacy-free information on the perceptions, opinions, and policy preferences of California residents. Inaugurated in April 1998, the survey series has generated a database that includes the responses of more than 132,000 Californians. The current survey is the seventh in a series of special surveys on *Californians and the Environment*, begun in June 2000, with funding from various foundations.

This survey on Californians and the environment, made possible with funding from The David and Lucile Packard Foundation, focuses on the state's marine and coastal issues. The intent of the survey is to inform policymakers, encourage discussion, and raise public awareness about a variety of environmental and growth-related matters facing the state. The current survey builds on a November 2003 survey from our environment series that offered the first comprehensive analysis of the public's perspectives on the wide range of marine and coastal issues confronting California today. California's 1,100-mile shoreline and its history of controversy over coastal development and oil drilling—as well as the potential consequences of global warming and the recent publication of national and international reports on marine pollution and the depletion of coral reefs, fish, and marine mammals—all point to the importance of investigating marine and coastal issues for the environmental survey series.

This special edition presents the responses of 2,003 adult residents throughout the state. It examines in detail Californians' views on ocean and coastal conditions in the state, their policy preferences and lifestyle choices in relation to the ocean and coastal areas, and their perceptions of state and federal efforts in the environmental arena. Some of the questions are repeated from previous PPIC surveys on Californians and the environment. More specifically, we examine the following issues:

- The public's perceptions of marine and coastal areas, including its rankings of ocean and beach pollution in relation to other state environmental problems, ratings of ocean quality and beach conditions today and over time, specific problems in the marine and coastal environment, and the importance of ocean and beach conditions to the state's economy and quality of life.
- Marine and coastal policies, including the branch of government that is most trusted to handle environmental policy, ratings of the president, federal government, governor, and state government on environmental issues, support for policies aimed at the protection of the marine and coastal environment, support and funding preferences for Marine Protected Areas, and the importance of candidate positions on marine and coastal issues in the 2006 elections.
- The public's interest in marine and coastal areas, including the importance and frequency of use of the state's beaches, marine recreation, educational activities, personal diet and the importance of fish and other seafood, environmental and safety concerns about eating fish and other seafood, and the importance of the environment—including marine and coastal issues—for the 2006 state elections.
- The extent to which Californians may differ with regard to attitudes toward marine and coastal issues by party affiliation, demographics, race/ethnicity, and region of residence.

This is the 64<sup>th</sup> PPIC Statewide Survey, which has included a number of special editions on the Central Valley (11/99, 3/01, 4/02, 4/03, 4/04), Los Angeles County (3/03, 3/04, 3/05), Orange County (9/01, 12/02, 12/03, 12/04), San Diego County (7/02), population (5/01, 12/05), land use (11/01, 11/02), housing (11/04), the environment (6/00, 6/02, 7/03, 11/03, 7/04, 7/05), the state budget (6/03, 1/04, 5/04, 1/05, 5/05, 1/06), California's future (8/04), and the initiative process (08/05, 09/05, 10/05, 11/05).

Copies of this report may be ordered by e-mail ([order@ppic.org](mailto:order@ppic.org)) or phone (415-291-4400). Copies of this and earlier reports are posted on the publications page of the PPIC web site ([www.ppic.org](http://www.ppic.org)). For questions about the survey, please contact [survey@ppic.org](mailto:survey@ppic.org).

## Subregions Used in This Report



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## Press Release

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Para ver este comunicado de prensa en español, por favor visite nuestra página de internet:  
<http://www.ppic.org/main/pressreleaseindex.asp>

### ***SPECIAL SURVEY ON CALIFORNIANS AND THE ENVIRONMENT***

#### **IGNORING ENVIRONMENTAL, COASTAL CONCERNS COULD BE PERILOUS FOR CALIFORNIA POLITICOS IN 2006 ELECTION YEAR**

#### **Bush Ratings Among Lowest Ever, Schwarzenegger Approval Headed Down Again; Bipartisan Beach Party? Agreement on Most Coastal Policies, But Levels of Concern Vary**

SAN FRANCISCO, California, February 23, 2006 —When it comes to environmental and coastal issues, Californians give President George Bush, Governor Arnold Schwarzenegger, and government in general, ratings that range from barely passing to positively dismal, according to a survey released today by the Public Policy Institute of California (PPIC) with funding from The David and Lucile Packard Foundation. For the president and governor, those harsh views extend to their overall job performance as well.

President Bush's approval ratings in California are among the lowest they have been since he first took office (61% disapprove, 36% approve). They are even lower for environmental and coastal policy: Only 27 percent approve of his handling of these issues. Among likely voters, his ratings are similarly grim (37% overall job approval, 26% environmental policy approval). Not surprisingly, Democrats and independents are mostly responsible for the president's negative numbers and Republicans for his positive ones: Majorities of Republicans approve of his overall job performance (74%) and handling of environmental policy (51%), while Democrats overwhelmingly disapprove of both (87% and 82%, respectively) and independents strongly disapprove (63% and 62%, respectively).

Governor Schwarzenegger fares about as poorly. His overall ratings among residents have lost the ground gained last month, tumbling to 35 percent from 40 percent approval in January. Among likely voters, the ratings slid to 40 percent from 45 percent. As with President Bush, Californians are even less enthusiastic about the governor's handling of the environment, including marine and coastal issues: Only 28 percent of all residents and 31 percent of likely voters approve of the job he's doing. Again, the partisan differences are resounding: While almost three-fourths (72%) of Democrats disapprove of the governor's overall performance, 66 percent of Republicans approve. On coastal and environmental issues, however, even his party's support is not quite so hearty: A bare majority (51%) of Republicans approve of his record on these issues.

Interestingly, a significant share of Californians – across political parties – don't know whether Governor Schwarzenegger is doing a good or bad job on environmental and coastal policy (25% all adults, 30% independents, 26% Republicans, 22% Democrats). "The governor has actually placed considerable emphasis on environmental issues such as improving air quality, developing less polluting forms of energy, and reducing global warming," says PPIC statewide survey director Mark Baldassare. "It's not clear whether greater voter knowledge about his environmental policies would help his overall standing, but it is clear that he hasn't connected well with the public on these issues."

Beyond leaders, Californians have little confidence in government generally when it comes to the environment – and specifically marine and coastal issues: Six in ten (60%) say the federal government is not doing enough to protect the coastal environment of the United States. Half (50%) say the state government is not doing enough to protect California's coast. If they had to choose a branch of government to manage the state's coastal resources, residents are split between local government (36%) and state government (36%), while the federal government (14%) is a distant third.



## **Coastal Issues Matter for '06 Elections; Love Affair with the Beach Unites Parties**

Considering how important beaches and the ocean environment are to state residents, political leaders may want to heed the possible fallout from these critical attitudes. An impressive nine in 10 Californians say the quality of the beach and ocean is just as important to them personally as well as for the overall quality of life and economy in the state. Residents say the condition of the coast is very important (61%) or somewhat important (30%) on a personal level, very important (70%) or somewhat important (24%) to the state's quality of life, and very important (63%) or somewhat important (30%) to the economy. Moreover, majorities across regions and political parties agree, although Republicans are less likely to say any of these issues are very important.

How might this love of the coast translate into decisions at the 2006 ballot box? In the election for California governor, an overwhelming number of likely voters (87%) say candidates' positions on the environment and coast will be important. This includes majorities in all major political parties (Democrats 92%, independents 89%, Republicans 80%), although fewer Republicans (30%) than Democrats (57%) or independents (50%) say this is very important. For the 2006 U.S. Senate election, 87 percent of likely voters say candidates' environmental positions will be important, as do majorities of Democrats (93%), independents (90%), and Republicans (76%).

"Californians treasure the ocean and the state's beaches," says Baldassare. "These attitudes run deep and wide across political parties, coastal and inland areas, and in the growing Latino population – to ignore them could be politically perilous." One example of Latino sentiment: Latinos are more likely than whites (60% to 44%) to say the environmental positions of gubernatorial candidates are very important to them.

There is unusual partisan harmony on every environmental policy question asked in the survey – except offshore oil drilling. Large majorities in all parties favor policies that protect the state's coastal environment – even if it means less access to some areas and activities, greater restrictions on fishing, and higher fees or taxes. Support is high for reducing ocean and beach pollution even if it means higher taxes (Democrats 80%, independents 73%, Republicans 68%); for restricting development along the coast (independents 74%, Democrats 72%, Republicans 65%); for protecting wetlands and habitats (Democrats 84%, independents 76%, Republicans 69%); and for creating more marine reserves that are off-limits to fishing (Democrats 77%, independents 74%, Republicans 65%). In fact strong majorities support creating these Marine Protected Areas in 10 to 20 percent of the state's coastal waters (Democrats 81%, independents 73%, Republicans 63%).

## **But Partisan Accord May Not Run Deep**

Despite this accord over ocean and beach protection, partisan divisions return strongly when it comes to just how concerned Californians are about the current and future state of the coastal environment. These divisions may indicate how far some groups are really willing to go to for "environmentally friendly" policies. For example, while 85 percent of residents say coastal pollution is a problem, far fewer Republicans (35%) than Democrats (58%) or independents (49%) believe this is a big problem. Similarly, more Democrats (66%) and independents (55%) than Republicans (39%) rate the health and quality of the ocean for marine life as not so good or poor.

Republicans (39%) are also significantly less likely than Democrats (57%) or independents (53%) to say pollution from local streets and storm drains is a big problem. And few Republicans (29%) consider contamination of fish and seafood to be a big problem, compared to Democrats (53%) and independents (46%). "Democrats and independents are much more negative in their perceptions of coastal conditions, ocean trends, and environmental threats than Republicans," says Baldassare. "Combine those misgivings with their almost complete lack of faith in the federal government to care for the state's coast, and it really puts pressure on state and local leaders to address their concerns."

## **Offshore Oil Drilling**

The highly controversial issue of opening up more of California's coast to oil drilling is again in the news – and again is strongly opposed by majorities of state residents (64%) and likely voters (67%). In fact, opposition among all adults today is higher than when we asked similar questions in PPIC surveys conducted during the summers of 2003 (54%), 2004 (50%), and 2005 (53%). The political divide on the issue is plain, with 80

percent of Democrats and 69 percent of independents opposed to the idea, versus 46 percent of Republicans. A slim majority of Republicans (51%) favor more offshore drilling.

### More Key Findings

- **Perturbed by Pollution in the Southland** (page 5)  
Coastal contamination from local street and storm drain pollution worries residents in the state's South Coast (61%) much more than in the North Coast (42%) or inland (44%) areas.
- **Strictly Speaking: California Coastal Commission Too Lax** (page 7)  
More residents (44%) say the California Coastal Commission is not strict enough in controlling coastal development than say the current controls are about right (27%) or too strict (10%).
- **Latinos More Beach Bound** (page 13)  
More Latinos than whites say ocean and beach conditions are very important to them personally (67% to 60%) and that ocean and beach pollution along the California coast is a big problem (59% to 46%).
- **Something's Fishy** (pages, 16, 17)  
Many Californians are very concerned about fish or seafood for sale having contaminants such as mercury (64%) and being commercially overfished (46%). Still, over half eat seafood or fish at least once a week (56%) and consider it very important to a healthy diet (54%).

### About the Survey

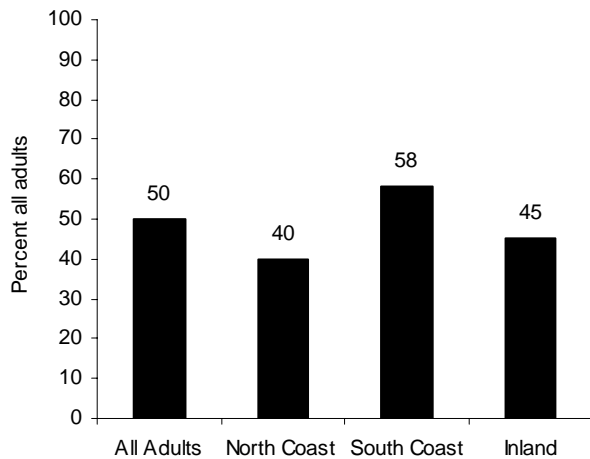
This survey on California's environment – made possible by funding from The David and Lucile Packard Foundation – is a special edition of the PPIC Statewide Survey. This is the seventh survey in a series intended to raise public awareness, inform decisionmakers, and stimulate public discussions about environmental and growth-related issues facing the state. Findings of this survey are based on a telephone survey of 2,003 California adult residents interviewed between February 8<sup>th</sup> and February 15<sup>th</sup>, 2006. Interviews were conducted in English and Spanish. The sampling error for the total sample is +/- 2%. The sampling error for subgroups is larger. For more information on methodology, see page 19.

Mark Baldassare is research director at PPIC, where he holds the Arjay and Frances Fearing Miller Chair in Public Policy. He is founder of the PPIC Statewide Survey, which he has directed since 1998. His recent book, *A California State of Mind: The Conflicted Voter in a Changing World*, is available at [www.ppic.org](http://www.ppic.org).

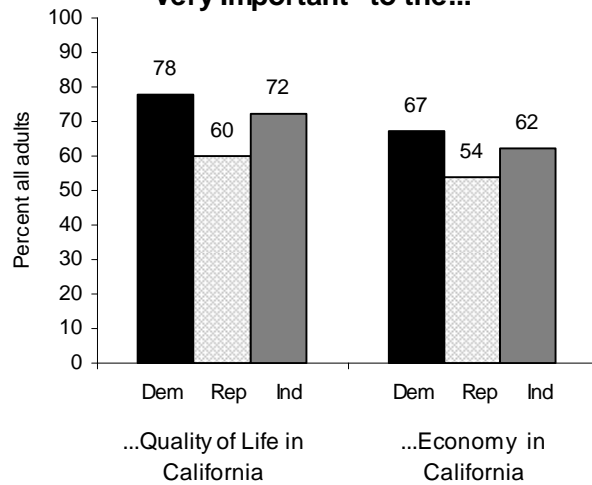
PPIC is a private, nonprofit organization dedicated to improving public policy through objective, nonpartisan research on the economic, social, and political issues that affect Californians. The institute was established in 1994 with an endowment from William R. Hewlett. PPIC does not take or support positions on any ballot measure or on any local, state, or federal legislation, nor does it endorse, support, or oppose any political parties or candidates for public office. This report will appear on PPIC's website ([www.ppic.org](http://www.ppic.org)) on February 23.

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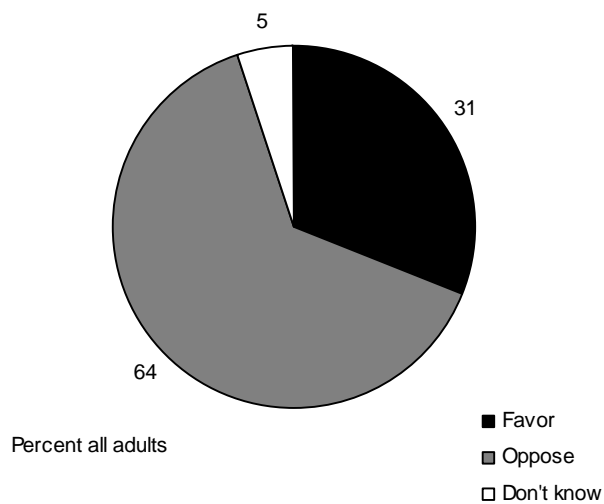
### Percent Who Believe Ocean and Beach Pollution Is a "Big Problem"



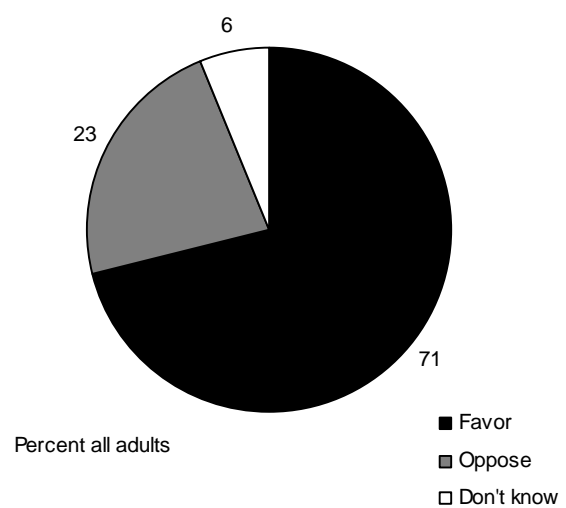
### Percent Who Believe the Condition of the Ocean and Beaches Is "Very Important" to the...



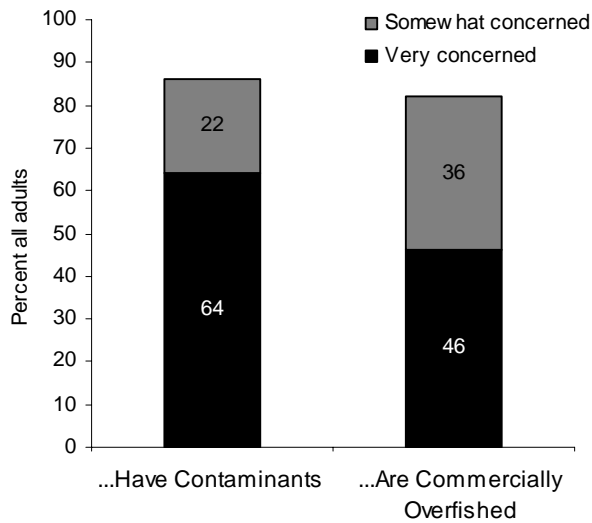
### Allow More Oil Drilling Off the California Coast



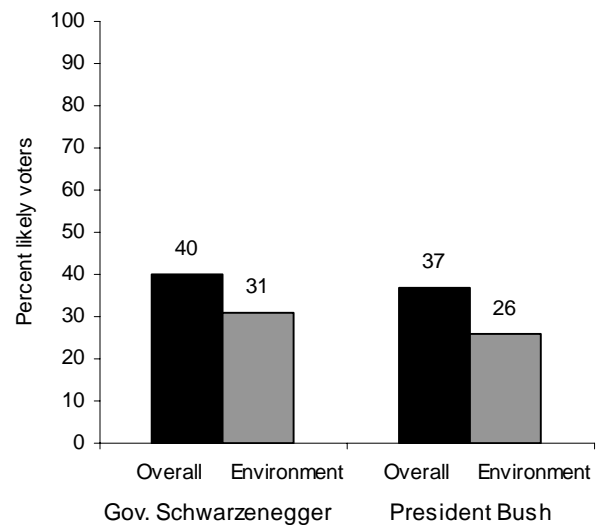
### Create More Marine Reserves Off the California Coast



### Concerned That Fish or Seafood for Sale...



### Approval Ratings of Elected Officials



## Marine and Coastal Perceptions

### Ratings of Environmental Problems

When asked to rate environmental issues, 85 percent of residents say that ocean and beach pollution along the coast is either a big problem (50%) or somewhat of a problem (35%). Responses were similar in June 2000 (53% big problem, 36% somewhat of a problem) and when we most recently asked about ocean and beach pollution in November 2003 (53% big problem, 34% somewhat of a problem).

The public's perceptions of the seriousness of ocean and beach pollution are similar to their evaluations of toxic substances affecting the soil and groundwater (51% big problem, 33% somewhat of a problem) and lower than their ratings of air pollution (58% big problem, 31% somewhat of a problem). Inland residents are especially likely to rate air pollution as a big problem in the state today (62%).

Over three in four residents in all political and demographic groups think ocean and beach pollution is at least somewhat of a problem in the state today. There are important differences, however, in the ratings of ocean and beach pollution as a big problem. Majorities of Democrats (58%) believe coastal pollution is a big problem, compared to half of independents (49%) and just one-third of Republicans (35%). In looking at geographic regions of the state, we find that residents along the South Coast (58%) are more likely than those on the North Coast (40%) and in Inland areas (45%) to say that coastal pollution is a big problem.

In terms of demographic trends, problem ratings of pollution decline with age, education, and income. Latinos are more likely than whites, women are more likely than men, renters are more likely than homeowners, and those with children are more likely than those without children to rate ocean and beach pollution as a big problem. The perception that ocean and beach pollution is a big problem is similar among those who have and have not been in California's bays or ocean waters in the past year.

**“How about ocean and beach pollution along the California coast? Do you think this is a big problem, somewhat of a problem, or not a problem in California today?”**

		Big problem	Somewhat of a problem	Not a problem	Don't know
<b>All Adults</b>		50%	35%	10%	5%
<b>Region</b>	<b>North Coast</b>	40	42	13	5
	<b>South Coast</b>	58	32	8	2
	<b>Inland</b>	45	33	12	10
<b>Gender</b>	<b>Male</b>	43	37	15	5
	<b>Female</b>	57	33	6	4
<b>Age</b>	<b>18-34 years old</b>	55	30	10	5
	<b>35-54 years old</b>	50	36	10	4
	<b>55 years or older</b>	44	39	11	6
<b>Race/Ethnicity</b>	<b>Latinos</b>	59	29	7	5
	<b>Whites</b>	46	38	11	5
<b>Party</b>	<b>Democrat</b>	58	32	6	4
	<b>Republican</b>	35	44	17	4
	<b>Independent</b>	49	40	8	3
<b>In-water activity</b>	<b>Yes</b>	52	34	11	3
	<b>No</b>	49	35	10	6

## Ocean Conditions and Trends

Many Californians give negative ratings to ocean conditions along the California coast today and are pessimistic about the trends in the overall health and quality of coastal waters. Four in 10 residents rate the overall health and quality of the ocean for marine life along the California coast today as excellent (4%) or good (36%), while over half say the health and quality is not so good (42%) or poor (13%).

South Coast residents (59%) are more likely than North Coast residents (52%) or Inland residents (49%) to rate the health and quality of the ocean for marine life as not so good or poor. Very few in any region say the ocean conditions are excellent. Opinion is divided along party lines, with two in three Democrats saying not so good (48%) or poor (18%) and a majority of Republicans saying either excellent (6%) or good (49%). Independents fall on the negative side (55% not so good or poor, 41% excellent or good).

**“Thinking about the overall health and quality of the ocean for marine life along the California coast today—would you rate it as excellent, good, not so good, or poor?”**

	All Adults	Region			Party		
		North Coast	South Coast	Inland	Dem	Rep	Ind
Excellent	4%	5%	3%	4%	2%	6%	3%
Good	36	38	32	39	28	49	38
Not so good	42	44	43	37	48	29	44
Poor	13	8	16	12	18	10	11
Don't know	5	5	6	8	4	6	4

Nearly half of the state’s residents (48%) think the overall health and quality of the ocean for marine life along the California coast has gotten worse over the past 20 years. Another 29 percent think the health and quality of the coastal waters has remained the same, while only 15 percent think conditions have improved. These findings closely resemble the responses to a similar question asked in November 2003 (52% worse, 26% the same, 13% better). Differences exist between party and racial/ethnic groups. Democrats (57%) and independents (49%) are more likely than Republicans (41%) to say the health and quality of the ocean for marine life has gotten worse, and whites are more likely than Latinos to say worse (51% to 42%). Residents in all demographic groups are generally negative about trends over time, with fewer than one in five saying the health and quality of the ocean has gotten better over the past 20 years.

Many Californians are more optimistic about the future—25 percent believe that over the next 20 years, the health and quality of the ocean will improve, and 24 percent believe that conditions will remain about the same. Nonetheless, nearly half of California’s residents (45%) think that ocean conditions will grow worse in the future.

**“Over the past 20 years, do you think the overall health and quality of the ocean for marine life along the California coast has gotten better, stayed about the same, or gotten worse?”**

	All Adults	Region			Party		
		North Coast	South Coast	Inland	Dem	Rep	Ind
Gotten better	15%	17%	14%	13%	11%	18%	17%
Stayed about the same	29	24	29	34	26	37	24
Gotten worse	48	51	49	44	57	41	49
Don't know	8	8	8	9	6	4	10

## Beach Quality and Trends

Californians are more upbeat about the conditions of the public beaches than they are about the state's coastal waters, with a majority rating the beaches as excellent (5%) or good (50%). Still, four in 10 residents say public beach conditions along the coast are not so good (32%) or poor (7%). Although residents' assessments of public beaches are far more positive than their assessments of the health and quality of the ocean for marine life, very few go so far as to call the conditions excellent. Only one in 10 or fewer among all adults and in any party, racial/ethnic, or other demographic category rate the conditions as excellent.

However, perceptions of beach conditions do vary across groups. North Coast residents (64%) are more likely than South Coast (51%) or Inland residents (56%) to rate the conditions of public beaches as excellent or good. Republicans (67%) are much more likely than Democrats (51%) or independents (53%) to rate conditions as excellent or good. Whites (63%) are far more likely than Latinos (46%) to say excellent or good, as are men (60%) compared to women (52%). Positive assessments increase with income and education, and also with recreational use of the state's ocean waters. Those who have participated in an in-ocean activity, such as swimming, in the past 12 months are more likely than those who have not done so to rate beach conditions as excellent or good (61% to 53%). The same trend applies to those who have and have not participated in an on-ocean activity, such as sailing (63% to 53%).

**“Thinking about the overall conditions of public beaches along the California coast today—would you rate them as excellent, good, not so good, or poor?”**

	All Adults	Region			Party		
		North Coast	South Coast	Inland	Dem	Rep	Ind
Excellent	5%	7%	4%	6%	4%	10%	3%
Good	50	57	47	50	47	57	50
Not so good	32	27	35	31	35	23	32
Poor	7	5	10	5	10	4	10
Don't know	6	4	4	8	4	6	5

Not only do a majority of Californians rate the overall conditions of the state's public beaches as generally good but, in stark contrast to perceived trends in ocean quality, nearly half (45%) say conditions have remained the same over the past 20 years. Still, 31 percent believe the conditions on beaches have gotten worse over time, while half as many say they have gotten better (16%). These trends are similar across regions. Majorities across political parties and demographic categories also think that conditions have gotten better or stayed the same, although Republicans (71%) are far more upbeat than Democrats (54%) or independents (62%), and men (65%) are more positive than women (57%).

**“Over the past 20 years, do you think overall conditions of public beaches along the California coast have gotten better, stayed about the same, or gotten worse?”**

	All Adults	Region			Party		
		North Coast	South Coast	Inland	Dem	Rep	Ind
Gotten better	16%	18%	15%	17%	13%	20%	20%
Stayed about the same	45	46	45	44	41	51	42
Gotten worse	31	27	34	32	41	24	29
Don't know	8	9	6	7	5	5	9

### Marine Concerns

When asked about three ocean-related issues affecting the part of the California coast nearest to them, the public's concerns about the contamination of fish and other seafood ranks higher than other pollution issues. Eight in 10 Californians view seafood and fish contamination as a big problem (44%) or somewhat of a problem (36%) in their area of the coast. In November 2003, 84 percent of the state's residents saw this issue as a big problem (52%) or somewhat of a problem (32%).

South Coast residents are more concerned today about this problem than residents in other areas. Across parties, Democrats (53%) and independents (46%) are far more likely than Republicans (29%) to view fish and seafood contamination as a big problem. Latinos are much more likely than whites (54% to 38%), and women more than men (49% to 40%), to view fish and seafood contamination as a big problem in their part of the state. Perceptions across age groups are similar.

While overfishing by commercial fishing interests is less of a concern than contamination of fish and seafood, about two in three Californians view it as a big problem (32%) or somewhat of a problem (33%). In November 2003, seven in 10 saw this particular marine issue as a big problem (36%) or somewhat of a problem (35%). Concern about this issue today is somewhat higher in the North Coast than in the South Coast and Inland regions. Independents (35%) and Democrats (37%) are more likely than Republicans (23%), and Latinos (40%) are more likely than whites (29%), to view overfishing as a big problem. Public perceptions of overfishing as a problem decline with income and education.

Public concern that recreational activities are leading to declining numbers of fish and marine life is similar to perceptions about overfishing—30 percent consider recreational activities a big problem, 36 percent as somewhat of a problem. There are no differences across regions; however, Democrats (34%) and independents (28%) are more likely than Republicans (17%) to view the declining numbers of fish and marine life due to recreational activities as a big problem. Latinos (42%) are much more likely than whites (22%), and women (35%) are more likely than men (25%), to view this issue as a big problem. Public concern about the effect of recreational activities on marine life decreases with income, age, and education level.

**"I am going to list some specific problems that some people say affect our ocean and marine life in California today. After each, please tell me whether you think it is a big problem, somewhat of a problem, or not a problem in the part of the California coast closest to you."**

		All Adults	Region			Latino
			North Coast	South Coast	Inland	
<i>How about the contamination of fish and seafood?</i>	Big problem	44%	43%	48%	40%	54%
	Somewhat of a problem	36	39	35	36	31
	Not a problem	15	16	13	18	11
	Don't know	5	2	4	6	4
<i>How about overfishing (depleting the fishing stock) by commercial fishing?</i>	Big problem	32	35	31	31	40
	Somewhat of a problem	33	35	33	31	35
	Not a problem	24	21	24	28	15
	Don't know	11	9	12	10	10
<i>How about declining numbers of fish and marine life due to recreational activities?</i>	Big problem	30	30	31	28	42
	Somewhat of a problem	36	38	37	35	36
	Not a problem	26	25	23	30	14
	Don't know	8	7	9	7	8

## Coastal Concerns

When asked to rate the severity of three given problems in the area of the California coast nearest to them, residents indicated that they were most concerned about ocean and beach pollution from streets and storm drains. Nearly nine in 10 Californians consider this issue a big problem (52%) or somewhat of a problem (35%). The public's views on pollution from streets and storm drains are similar to views voiced in November 2003, when nearly nine in 10 saw this issue as a big problem (52%) or somewhat of a problem (34%).

Today, South Coast residents (61%) are far more likely than Inland residents (44%) or North Coast residents (42%) to rate pollution from streets and storm drains as a big problem. Partisan differences also exist, with Democrats (57%) and independents (53%) more likely than Republicans (39%) to consider this type of pollution a big problem. Latinos (63%) are more likely than whites (45%), and women (55%) are more likely than men (48%), to perceive such pollution along their area of the coast to be a big problem. This perception declines with age, education, and income.

Three in four adults say that too much growth and development along the coast is a big problem (41%) or somewhat of a problem (33%). Current views are similar to those in November 2003, when seven in 10 adults said this issue was a big problem (36%) or somewhat of a problem (35%). Today, Inland and South Coast residents are somewhat more likely than North Coast residents to hold this view. Across party lines, Democrats (48%) and independents (41%) are more likely than Republicans (35%) to view too much growth and development as a big problem. Women (46%) are more likely than men (36%) to say too much coastal growth and development is a big problem, and this perception increases slightly with age and education.

As for perceptions of limited access to the coast and beaches, half of California's residents view this as a big problem (20%) or somewhat of a problem (33%). Democrats (21%) are more likely than Republicans (15%) and independents (16%) to view limited public access as a big problem. Latinos (26%) are more likely than whites (18%) to consider this issue a big problem. In November 2003, almost six in 10 adults said that limited public access was a big problem (20%) or somewhat of a problem (38%).

**"I am going to list some specific problems that some people say affect our ocean and marine life in California today. After each, please tell me whether you think it is a big problem, somewhat of a problem, or not a problem in the part of the California coast closest to you."**

		All Adults	Region			Latino
			North Coast	South Coast	Inland	
<i>How about ocean and beach pollution from streets and storm drains?</i>	Big problem	52%	42%	61%	44%	63%
	Somewhat of a problem	35	39	31	39	28
	Not a problem	10	15	6	10	6
	Don't know	3	4	2	7	3
<i>How about too much growth and development on the coast?</i>	Big problem	41	37	42	42	38
	Somewhat of a problem	33	32	33	33	35
	Not a problem	23	27	21	21	20
	Don't know	3	4	4	4	7
<i>How about limited public access to the coast and beaches?</i>	Big problem	20	15	21	25	26
	Somewhat of a problem	33	32	35	31	39
	Not a problem	42	49	41	38	31
	Don't know	5	4	3	6	4



## Overall Impacts on California

The California coast has always been an integral part of the California Dream—and it is likely that this is true not only for the state’s residents but for many others throughout the country. Nor has this feeling changed after decades of growth and change. Currently, nearly all Californians view the condition of the ocean and beaches as very important (70%) or somewhat important (24%) to the quality of life in California. Public sentiments were similar in our November 2003 survey, when almost all adults rated the ocean and beaches of the state as very important (69%) or somewhat important (26%).

Residents of the North Coast today are the most likely to hold this view, followed by residents of the South Coast and Inland areas. Democrats and independents are more likely than Republicans to view the condition of the ocean and beaches as very important. Those who have participated in in-ocean activities over the past year—such as swimming, surfing, snorkeling, or scuba diving—are more likely than those who have not to view the ocean and beach as important (77% to 66%). About seven in 10 residents across all income, age, education, gender, and racial/ethnic categories say the condition of the ocean and beaches is very important to the quality of life in California.

### “How important is the condition of the ocean and beaches to the quality of life in California?”

	All Adults	Region			Party		
		North Coast	South Coast	Inland	Dem	Rep	Ind
Very important	70%	75%	69%	67%	78%	60%	72%
Somewhat important	24	22	25	25	19	32	23
Not too important	4	2	5	4	2	6	3
Not important at all	1	1	1	2	1	2	1
Don’t know	1	0	0	2	0	0	1

Nearly all Californians also view the condition of the ocean and beaches as very (63%) or somewhat (30%) important to the state’s economic vitality. We find little difference across regions; however, Democrats and independents are more likely than Republicans to consider the oceans and beaches very important. Latinos (68%) are more likely than whites (59%), and women (66%) are more likely than men (59%), to view the condition of the ocean and beaches as very important to the California economy. This perception of the economic importance of the ocean and beaches is similar across age groups; however, it declines with income and education. Public perceptions today are similar to those in November 2003, when nine in 10 Californians viewed the condition of the ocean and beaches as very important (61%) or somewhat important (30%) to the California economy.

### “How important is the condition of the ocean and beaches to the economy in California?”

	All Adults	Region			Party		
		North Coast	South Coast	Inland	Dem	Rep	Ind
Very important	63%	61%	64%	62%	67%	54%	62%
Somewhat important	30	33	29	29	27	37	30
Not too important	4	4	4	4	3	6	4
Not important at all	1	1	1	2	1	2	2
Don’t know	2	1	2	3	2	1	2

## Marine and Coastal Policies

### Trust in Government

When it comes to handling the state's marine and coastal issues, Californians say they trust state and local governments equally (36% each). Only 14 percent trust the federal government to do a better job in this area. Likely voters are similarly divided between trusting state (40%) and local governments (39%), with just 10 percent trusting the federal government. Trust in local government has grown 6 points since we last asked this question in November 2003 (30%), while trust in state government has fallen by 6 points (42%). Trust in the federal government has not changed.

Republicans prefer state (44%) over local government (36%), while Democrats and independents are fairly divided. North Coast residents tend to place more trust in their local government over state government, while Inland residents trust state more than local government to handle these issues. South Coast residents are divided.

**“Which branch of government do you trust to do a better job in handling marine and coastal issues in California—the federal, the state, or the local government?”**

	All Adults	Party			Likely Voters
		Dem	Rep	Ind	
<b>Federal government</b>	14%	11%	12%	17%	10%
<b>State government</b>	36	38	44	36	40
<b>Local government</b>	36	41	36	33	39
<b>None of them (<i>volunteered</i>)</b>	4	4	3	6	5
<b>Other / Don't know</b>	10	6	5	8	6

Nearly half of the state's residents (44%) say the California Coastal Commission's controls on development are not strict enough, 27 percent say these controls are about right, and only one in 10 say they are too restrictive. The perception that coastal development policies are too lax has risen 6 points since November 2003 (38%), and the percentage saying they are about right has fallen by 4 points (31%). A majority of Democrats (56%) and nearly half of independents (46%) today say controls on development are not strict enough. Republicans are somewhat more divided between saying controls on development are too lenient (35%) and about right (29%). A plurality of residents in the North Coast (41%), South Coast (46%), and Inland areas (45%) say current policies are not strict enough.

What about the California State Fish and Game Commission's controls on commercial and recreational fishing? More residents say they are about right (42%) than not strict enough (30%) or too strict (10%). This general trend in the perception of this commission occurs in both coastal areas and in the Inland region.

**“Overall, what do you think of the California Coastal Commission when it comes to controls on development—are they too strict, about right, or not strict enough?”**

	All Adults	Party			Likely Voters
		Dem	Rep	Ind	
<b>Too strict</b>	10%	5%	16%	10%	10%
<b>About right</b>	27	23	29	25	25
<b>Not strict enough</b>	44	56	35	46	48
<b>Don't know about the California Coastal Commission / Don't know</b>	19	16	20	19	17

## President Bush and Federal Policies

President Bush's overall approval ratings are at 36 percent among all adults in California—among the lowest they have been since he took office in 2001. Likely voters are similarly negative. Bush's approval ranks lower in California (36%) than it does nationwide (39%, February CNN/USA Today/Gallup Poll). The president's current approval rating in California is similar to his January rating in the state. Yet it is 10 points lower than it was in January 2005. Today, Bush's ratings remain sharply divided along party lines, with 74 percent of Republicans approving of his performance and 87 percent of Democrats and about two in three independents disapproving. Approval ratings are higher among whites than Latinos (41% to 31%).

Bush's approval ratings are even lower when it comes to the environment. Only 27 percent of all adults approve of the way he is handling environmental policy, such as marine and coastal issues, and likely voters' approval ratings are similarly low. Approval for the president's performance in this area has fallen 8 points since November 2003 (35%). Democrats (82%) and independents (62%) are highly disapproving of Bush's environmental policies. Republicans give him considerably lower approval in this area than they do overall (51% to 74%). Residents in all regions are more likely to disapprove of Bush's performance on the environment, but North Coast residents (70%) are the most critical. Latinos (28%) and whites (29%) express similarly low levels of approval for his environmental policies.

**"Overall, do you approve or disapprove of the way that...?"**

		All Adults	Party			Region			Likely Voters
			Dem	Rep	Ind	North Coast	South Coast	Inland	
<i>George W. Bush is handling his job as President of the United States?</i>	Approve	36%	11%	74%	32%	23%	37%	45%	37%
	Disapprove	61	87	22	63	73	59	52	60
	Don't know	3	2	4	5	4	4	3	3
<i>President Bush is handling environmental policy—such as marine and coastal issues—in the United States?</i>	Approve	27	8	51	23	18	26	35	26
	Disapprove	59	82	31	62	70	59	49	62
	Don't know	14	10	18	15	12	15	16	12

Six in 10 Californians (60%) say the federal government is not doing enough to protect the coastal and marine environment in the United States, while one in three say it is doing just enough (29%) or more than enough (5%). Likely voters give a similar assessment. Eight in 10 Democrats (78%) and a majority of independents (59%) say the federal government's efforts in this area are inadequate, while the majority of Republicans say they are just enough (44%) or more than enough (9%). Since November 2003, the perception that the federal government is not doing enough has risen 6 points.

**"Overall, do you think that the federal government is doing more than enough, just enough, or not enough to protect the coastal and marine environment in the United States?"**

	All Adults	Party			Likely Voters
		Dem	Rep	Ind	
More than enough	5%	2%	9%	6%	5%
Just enough	29	14	44	27	26
Not enough	60	78	40	59	63
Don't know	6	6	7	8	6

## Governor Schwarzenegger and State Policies

Governor Schwarzenegger's approval ratings have lost the boost seen last month. Today, 35 percent of all adults approve of the way he is handling his job, while 53 percent disapprove. Among likely voters, 40 percent approve and 50 percent disapprove of his performance. In January, the governor's approval ratings were at 40 percent among all adults and 45 percent among likely voters—the highest they had been since May 2005. The governor's current approval ratings are now back to the level of October 2005 (33% approve)—well below the 60 percent approval he had at the start of last year. The governor remains highly popular among Republicans (66% approve) and continues to be unpopular among Democrats (72% disapprove), with no change since last month. Independents are divided, with 42 percent approving and 43 percent disapproving. The governor's approval is highest Inland and lowest on the North Coast. Whites remain more favorable toward him than Latinos (46% to 20%), and men more than women (41% to 29%).

When it comes to the governor's handling of environmental policy—such as marine and coastal issues—28 percent approve, 47 percent disapprove and 25 percent have no opinion. His approval ratings in this area are higher inland than on the coast, and 51 percent of Republicans approve while 63 percent of Democrats disapprove.

**“Overall, do you approve or disapprove of the way that...?”**

		All Adults	Party			Region			Likely Voters
			Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Arnold Schwarzenegger is handling his job as governor of California?</b>	Approve	35%	19%	66%	42%	28%	36%	39%	40%
	Disapprove	53	72	24	43	59	53	47	50
	Don't know	12	9	10	15	13	11	14	10
<b>Governor Arnold Schwarzenegger is handling environmental policy—such as marine and coastal issues—in California?</b>	Approve	28	15	51	30	26	27	33	31
	Disapprove	47	63	23	40	48	49	42	43
	Don't know	25	22	26	30	26	24	25	26

Californians are somewhat more positive about the state's than the federal government's efforts in protecting the marine and coastal environment. Nonetheless, half (50%) still say the state government is not doing enough, while four in 10 say it is either doing just enough (37%) or more than enough (6%). Among likely voters, 51 percent say the state government is not doing enough to protect the coastal environment. Democrats, independents, and coastal residents are more likely than Republicans and Inland residents to hold this view. Moreover, the percentage of adults saying the state government is not doing enough in this arena has risen 6 points since November 2003 (44%).

Overall, nine in 10 Californians say funding for marine protection should be a very (48%) or somewhat (42%) important priority in the state budget. Large majorities in all parties and regions agree.

**“Overall, do you think that the state government is doing more than enough, just enough, or not enough to protect the coastal and marine environment in California?”**

	All Adults	Party			Likely Voters
		Dem	Rep	Ind	
More than enough	6%	1%	12%	5%	6%
Just enough	37	29	44	38	36
Not enough	50	62	36	49	51
Don't know	7	8	8	8	7

## Oceans and Beaches

Californians appear to be generally receptive to a wide range of environmental policy suggestions geared toward protecting the state's oceans and beaches.

State residents, by a two-to-one majority, oppose allowing more oil drilling off the coast, even in the current context of concerns about energy prices and U.S. dependence on foreign oil sources. This finding is consistent with all previous survey findings; however, public opposition is actually higher today (64%) than in our most recent surveys, in which similar questions were asked (July 2003, 54%; July 2004, 50%; July 2005, 53%).

Public attitudes toward allowing more offshore oil drilling vary by party, with Democrats (80%) and independents (69%) overwhelmingly opposed and half of Republicans (51%) in favor. Likely voters are strongly opposed to more offshore drilling (67%).

Opposition is strongest along the North Coast (75%), but solid majorities of those on the South Coast (63%) and Inland (57%) are also opposed to more drilling. Opposition increases with education but declines with age; it is similar across income groups. In all demographic groups, however, solid majorities are opposed to more drilling. There are low levels of support among whites (34%) and Latinos (29%).

**“How about allowing more oil drilling off the California coast? Do you favor or oppose such an action?”**

	All Adults	<u>Party</u>			<u>Region</u>			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Favor</b>	31%	16%	51%	28%	22%	33%	37%	30%
<b>Oppose</b>	64	80	46	69	75	63	57	67
<b>Don't know</b>	5	4	3	3	3	4	6	3

Californians also express a strong desire to improve the quality of beaches and ocean water despite the fact that cleanup activities may be costly. Seven in 10 support reducing ocean and beach pollution from streets and storm drains, even if this means paying higher fees and taxes. When a similar question was asked in November 2003, 72 percent favored this tradeoff and 24 percent opposed it. Support is higher today in the North Coast (79%) than in the South Coast (71%) and Inland (65%); however, strong majorities in all regions favor this idea. Democrats (80%) and independents (73%) are more supportive than are Republicans (68%), but support is strong across parties. Support increases with age, education, and income, and is higher among whites (77%) than Latinos (62%). Majorities in all demographic groups favor cleaning up ocean and beach pollution, even with higher costs.

**“How about reducing ocean and beach pollution from streets and storm drains, even if this means paying higher fees or taxes? Do you favor or oppose such an action?”**

	All Adults	<u>Party</u>			<u>Region</u>			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Favor</b>	71%	80%	68%	73%	79%	71%	65%	77%
<b>Oppose</b>	25	18	29	24	20	25	30	21
<b>Don't know</b>	4	2	3	3	1	4	5	2

## Coastal Lands and Waterways

Most Californians also favor environmental policies that limit the use of coastal lands and waterways, despite the effects of such restrictions. For example, two in three adults favor restricting private development along the coast, even if it means less available housing in this area. In November 2003, a similar 69 percent were in favor and 27 percent were opposed to this idea.

Today, three in four Democrats (72%) and independents (74%) and 65 percent of Republicans agree upon this matter. Majorities of North Coast (70%), South Coast (64%), and Inland (69%) residents favor restricting private coastal development. Likely voters favor this policy by a three-to-one margin. Support for such restrictions tends to increase with age, education, and income and is higher among whites (74%) than Latinos (56%). Renters (64%) and homeowners (70%) differ somewhat in their degrees of support; however, both groups strongly favor restrictions on coastal development.

**“How about restricting the private development of land along the California coast, even if this means there will be less housing available near the ocean and beaches? Do you favor or oppose such an action?”**

	All Adults	Party			Region			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Favor</b>	67%	72%	65%	74%	70%	64%	69%	74%
<b>Oppose</b>	29	25	32	25	27	31	28	24
<b>Don't know</b>	4	3	3	1	3	5	3	2

Californians are even more supportive of protecting wetlands and habitats near the bays and beaches, even if it means less commercial activity near the coast: Seventy-five percent are in favor of this idea and just 21 percent are opposed. In November 2003, a similar 77 percent were in favor and 18 percent were opposed.

Today, majorities of Californians across political parties favor protecting coastal wetlands and habitats, although support is significantly higher among Democrats (84%) and independents (76%) than among Republicans (69%). While support is high across regions, North Coast (83%) residents favor such protections more than South Coast (74%) and Inland (70%) residents. Support increases with education.

**“How about protecting the wetlands and habitats near the bays and beaches, even if this means there will be less commercial and recreational activity near the California coast? Do you favor or oppose such an action?”**

	All Adults	Party			Region			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Favor</b>	75%	84%	69%	76%	83%	74%	70%	79%
<b>Oppose</b>	21	12	27	21	14	22	24	18
<b>Don't know</b>	4	4	4	3	3	4	6	3

In what could become an important growth and environmental issue in the future, the possibility of building desalination plants along the coast is beginning to get some public attention. Currently, 56 percent of Californians are in favor of building such plants, while 33 percent are opposed and 11 percent don't know. Support differs somewhat by region (49% North Coast, 58% South Coast, 57% Inland) and party (49% Democrats, 64% Republicans, 60% independents) but varies little by income and education.

## Marine Protected Areas

As further indication of Californians' preference for protecting the coastal environment, seven in 10 residents are in favor of creating more marine reserves off the California coast, even if it means that some ocean areas will be off-limits to commercial and recreational fishing. Just 23 percent of residents oppose new reserves. In November 2003, a similar 75 percent were in favor of creating more marine reserves; twenty-one percent opposed them.

Today, 77 percent of Democrats and 74 percent of independents support this policy suggestion, as do 65 percent of Republicans. About seven in 10 coastal residents (74% North, 71% South) and Inland residents (68%) are in favor of it. Likely voters are supportive by more than a three-to-one margin. Support rises with income and education and is high for both Latinos (66%) and whites (74%).

**“How about creating more marine reserves off the California coast, even if this means that some ocean areas will be off-limits to commercial and recreational fishing? Do you favor or oppose such an action?”**

	All Adults	Party			Region			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Favor</b>	71%	77%	65%	74%	74%	71%	68%	75%
<b>Oppose</b>	23	17	29	20	21	23	26	19
<b>Don't know</b>	6	6	6	6	5	6	6	6

Currently, there are plans to create new Marine Protected Areas (MPAs) up to three miles from the shoreline in about 10 to 20 percent of the ocean waters along the California coast. Seventy-five percent of Californians say this is a good idea, while just 17 percent describe it as a bad idea. At least seven in 10 residents in all regions, and majorities of voters across party groups, support the creation of new MPAs.

Seven in 10 residents across age, education, and income categories concur. In fact, while 84 percent of those who generally favor creating more marine reserves also favor the creation of new MPAs, even 52 percent of those who generally oppose creating more marine preserves think new MPAs are a good idea.

How to fund new Marine Protected Areas? Fifty-nine percent favor placing a guest tax on coastal hotel rooms; 36 percent are opposed to this idea. Support is higher among Democrats and independents (66% each) than among Republicans (45%) and on the North Coast (66%) than on the South Coast (58%) or Inland (55%).

**“Marine Protected Areas, or MPAs are created and managed by the California State Fish and Game Commission to protect fish, wildlife, and their habitat in coastal waters within three miles from shore. Do you think it is a good idea or a bad idea to create new Marine Protected Areas in about 10 to 20 percent of the ocean waters along California's coast?”**

	All Adults	Party			Region			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
<b>Good idea</b>	75%	81%	63%	73%	79%	75%	71%	72%
<b>Bad idea</b>	17	11	28	18	12	17	21	19
<b>Don't know</b>	8	8	9	9	9	8	8	9

## Marine and Coastal Interests

### Beach Importance

Californians consider the condition of the ocean and beaches just as important to them personally as to the state's quality of life and its economy. Nine in 10 residents rate coastal quality as very (61%) or somewhat important (30%) to them personally. This is similar to our November 2003 survey, in which nine in 10 adults said that ocean and beach conditions were at least somewhat important. An overwhelming majority in all regions consider the condition of oceans and beaches personally important, but Inland residents are somewhat less likely than those living along the coast to say it is very important. The issue is rated very important by seven in 10 Democrats and independents (69% each) but fewer than half of Republicans (49%). Latinos rate it more important than do whites (67% to 60%). The percentage calling ocean and beach quality very important is greater among women than men (65% to 58%) and decreases with age and income. However, majorities in all groups say it is very important to them.

**“How important is the condition of the ocean and beaches in California to you personally—is it very important, somewhat important, not too important, or not important at all?”**

	All Adults	<u>Region</u>			Latinos
		North Coast	South Coast	Inland	
<b>Very important</b>	61%	66%	62%	58%	67%
<b>Somewhat important</b>	30	29	30	30	28
<b>Not too important</b>	6	4	5	8	3
<b>Not important at all</b>	2	0	2	2	1
<b>Don't know</b>	1	1	1	2	1

With 75 percent of all adults visiting a beach at least several times a year, it is no surprise that Californians say the condition of the state's oceans and beaches is important to them personally. This is similar to our findings in November 2003, when 72 percent said they visited a beach at least several times a year. While Inland residents (13%) are less likely than those living near the North (43%) or South Coast (41%) to hit the beach at least monthly, two in three visit a California beach several times a year. Latinos and whites go to the beach about equally. Beach visits increase with income and decline with age.

**“How often would you say you visit a beach on the California coast for any purpose—once a week, once a month, several times a year, once a year, less than once a year, or never?”**

	All Adults	<u>Region</u>			Latinos
		North Coast	South Coast	Inland	
<b>Once a week</b>	17%	22%	23%	3%	12%
<b>Once a month</b>	16	21	18	10	17
<b>Several times a year</b>	42	42	37	51	48
<b>Once a year</b>	12	8	10	17	13
<b>Less than once a year</b>	8	4	8	12	6
<b>Never</b>	5	3	4	7	4



## Recreational Uses

More than one in three Californians say they have done in-ocean activities, such as swimming, surfing, snorkeling, or scuba diving along the state's coast in the past year, while one in four have done on-ocean activities, such as sailing, kayaking, motor boating, or fishing. South Coast residents (40%) and Inland residents (36%) are more likely than those living on the North Coast (30%) to do in-ocean activities. Californians with children are also more likely than those without children to get into the water. Latinos and whites do in-ocean activities about equally, while whites are more likely to go out on the ocean. Both in-ocean and on-ocean activities increase with income and decrease with age.

"In the past twelve months, have you gone..."

		<i>Swimming, surfing, snorkeling, or scuba diving in the ocean or the bays of the California coast?</i>		<i>Sailing, kayaking, motor boating, or fishing on the ocean or the bays of the California coast?</i>	
		Yes	No	Yes	No
<b>All Adults</b>		36%	64%	26%	74%
<b>Region</b>	<b>North Coast</b>	30	70	30	70
	<b>South Coast</b>	40	60	26	74
	<b>Inland</b>	36	64	22	78
<b>Parents</b>	<b>Yes</b>	43	57	26	74
	<b>No</b>	32	68	26	74
<b>Income</b>	<b>Under \$40,000</b>	30	70	17	83
	<b>\$40,000 to \$79,999</b>	38	62	27	73
	<b>\$80,000 or more</b>	46	54	38	62
<b>Race/Ethnicity</b>	<b>Latino</b>	39	61	18	82
	<b>White</b>	36	64	29	71

When we combine the responses for in-ocean and on-ocean activities, slightly fewer than half of Californians (46%) have done some type of ocean activity in the past year. Younger people are more likely than older people, and men more likely than women, to do some kind of ocean activity. Those with children are more likely than those without children to do in-ocean or on-ocean activities. Participation also increases with income and education. Whites and Latinos are about equally likely to do ocean activities. Participation is somewhat higher along the South Coast (48%) than Inland and on the North Coast (44% each).

"In the past twelve months, have you gone..."

		In-ocean activity	On-ocean activity	Both	None
<b>All Adults</b>		20%	10%	16%	54%
<b>Age</b>	<b>18-34</b>	27	7	21	45
	<b>35-54</b>	22	11	18	49
	<b>55+</b>	8	11	9	72
<b>Gender</b>	<b>Male</b>	22	11	21	46
	<b>Female</b>	19	8	11	62

## Educational Activities

Eight in 10 Californians say they are interested in learning more about the ocean and marine life. A similarly large percentage of Californians today—72 percent—have acted on that interest by visiting an aquarium or other marine educational facility in the past few years.

These findings are similar to those in our November 2003 survey, when 73 percent said they had recently visited an aquarium or other exhibit of living marine life.

North Coast residents (82%) are much more likely to have gone to a marine life display such as an aquarium than are South Coast (69%) and Inland residents (67%). A majority of Californians across all demographic groups have made such a visit in recent years, with whites more likely to do so than Latinos (76% to 63%). Participation rates also increase with income and education. Marine exhibits are an almost equal draw for Californians without children as for those with children (69% to 75%).

Californians who favor creating more marine reserves are more likely to have visited an aquarium in the past few years (76%), although a majority of those who oppose more marine reserves have also recently attended a marine life exhibit in an aquarium or other educational facility (62%).

**“In the past few years, have you visited an aquarium or other educational facility about marine life?”**

	All Adults	Region			Parent		Latinos
		North Coast	South Coast	Inland	Yes	No	
<b>Yes</b>	72%	82%	69%	67%	75%	69%	63%
<b>No</b>	28	18	31	33	25	31	37

Although most Californians have visited aquariums or other marine life educational facilities, fewer (57%) have recently gone to a marine preserve or a public beach to observe tide pools and ocean life. Still, majorities in all regions say they have visited a marine preserve or tide pools within the past few years, with North Coast residents (69%) more likely to have done this than those in the South Coast (54%) and Inland areas (52%). Whites are much more likely than Latinos (64% to 45%), and parents more than those without children at home (60% to 55%) to say they have recently visited a marine preserve.

This type of educational and recreational activity also increases sharply with income (45% under \$40,000; 60% \$40,000 to \$79,000; 71% \$80,000 or more) and education (42% high school or less; 63% some college; 68% college graduate), and is also more common in the 35-to-54 age group (64%) than for younger adults (55%) and older adults (49%). There is little difference between men and women.

**“And in the past few years, have you visited a marine preserve or public beach to observe tide pools and ocean life?”**

	All Adults	Region			Parent		Latinos
		North Coast	South Coast	Inland	Yes	No	
<b>Yes</b>	57%	69%	54%	52%	60%	55%	45%
<b>No</b>	43	31	46	48	40	45	55

## Personal Diet

The marine and coastal environment also plays an important role in Californians' diets. A majority (56%) say they eat fish or other seafood often (i.e., once a week or more), 28 percent consume fish or seafood sometimes and only one in six do so seldom or never. These results are similar to our November 2003 survey (54% often).

Today, nearly a majority of residents in all regions and demographic groups eat fish at least once a week, although North Coast and South Coast residents (58% each) do so more frequently than do Inland residents (51%). Whites eat fish or other seafood more often than do Latinos (58% to 47%). Eating fish on a frequent or weekly basis increases with age, income, and education, while there is little difference between men and women, or between households with and without children.

### "How often would you say you eat fish or seafood at home or in a restaurant?"

	All Adults	Region			Age		
		North Coast	South Coast	Inland	18-34	35-54	55+
Several times a week	22%	25%	24%	17%	15%	23%	31%
About once a week	34	33	34	34	30	35	36
Sometimes	28	30	25	30	35	26	20
Rarely	11	9	12	12	14	11	9
Never	5	3	5	7	6	5	4

Eighty-six percent of Californians believe eating fish or seafood is very important (54%) or somewhat important (32%) for a healthy diet, while 14 percent say it is not too (9%) or not at all important (5%). These perceptions are similar to those voiced in November 2003, when 82 percent said fish were an important part of a healthy diet.

Today, belief in the health benefits of eating fish or other seafood increases with age and is more prevalent among women than men (59% to 49%). Whites (52%) and Latinos (54%), those with children (54%) and without children (53%), and residents in all regions have similar views on the benefits of eating fish. Despite greater consumption among higher income and education groups, there are no demographic differences in opinions on the health benefits of eating fish. Overall, 73 percent of residents who report eating fish or seafood once a week or more say that it is very important to having a healthy diet.

### "How important would you say that eating fish or seafood is to your having a healthy diet?"

	All Adults	Age			Sex		Latinos
		18-34	35-54	55+	Male	Female	
Very important	54%	45%	57%	62%	49%	59%	54%
Somewhat important	32	37	29	29	35	28	31
Not too important	9	10	9	6	10	7	10
Not at all important	5	8	5	3	6	6	5

## Food Safety

Despite eating fish and seafood often, Californians are worried about possible contaminants. Sixty-four percent are very concerned about toxins, such as mercury, in the fish they eat. In November 2003, a similar question found 50 percent were very concerned about fish and seafood contamination by ocean pollution, 33 percent somewhat concerned, and 16 percent were not too concerned or not at all concerned.

Concerns about mercury and other contaminants are greater among Democrats (73%) and independents (63%) than among Republicans (48%). Residents of the North Coast (69%) are more likely than those in the South Coast (64%) and Inland region (59%) to be very concerned about this issue. Latinos are significantly more worried about contaminated seafood than are whites (70% to 57%), and women more than men (70% to 58%). Concern declines with education and income. Among Californians who frequently eat seafood, 68 percent are very concerned about such contaminants in their food.

**“How concerned are you that the fish or seafood for sale have contaminants such as mercury?”**

	All Adults	Party			Education			Latinos
		Dem	Rep	Ind	High School	Some College	College Graduate	
Very concerned	64%	73%	48%	63%	69%	63%	60%	70%
Somewhat concerned	22	17	29	25	19	23	26	19
Not too concerned	9	6	16	8	8	10	10	7
Not at all concerned	4	3	6	4	4	4	4	3
Don't know	1	1	1	0	0	0	0	1

Although contamination in the fish they eat is of greater concern to Californians than is overfishing, 46 percent of all adults say they are very concerned that fish or seafood is being commercially overfished. Concern about depleting the fish population has increased 8 points since November 2003, when 38 percent of residents said they were very concerned about commercial overfishing.

Today, this issue is of greater concern to Democrats (56%) and independents (46%) than Republicans (30%). Residents along the coast express greater concern than do those living inland. Latinos are much more worried about commercial overfishing than are whites (53% to 41%), and women more than men (49% to 43%). Concern declines somewhat as education and income rise. Nearly half of residents who eat fish or seafood frequently are very concerned about commercial overfishing (49%).

**“How concerned are you that the fish or seafood for sale are commercially overfished?”**

	All Adults	Party			Region			Latinos
		Dem	Rep	Ind	North Coast	South Coast	Inland	
Very concerned	46%	56%	30%	46%	48%	48%	41%	53%
Somewhat concerned	36	31	41	36	38	33	37	33
Not too concerned	11	7	19	12	9	10	13	8
Not at all concerned	5	3	7	4	3	5	6	4
Don't know	2	3	3	2	2	4	3	2

## Political Importance

How might Californians' strong beliefs in the importance of the marine and coastal environment to the state's economy and quality of life translate into decisions at the ballot box this year? Regarding the upcoming gubernatorial election, nearly half of residents and a similar number of likely voters say the candidates' positions on the environment, including marine and coastal issues, are very important to them. There are strong regional, political, and demographic differences. Democrats (57%) and independents (50%) are much more likely than Republicans (30%) to say a candidate's position on the environment is very important, and Latinos emphasize this far more than do whites (60% to 44%). The issue is considered more important by North Coast residents than by those in the other regions and it matters more to women than men (54% to 43%).

**"In thinking about the upcoming California governor's election in 2006, how important to you are the candidates' positions on the environment—including marine and coastal issues?"**

	All Adults	Party			Region			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
Very important	48%	57%	30%	50%	55%	47%	45%	46%
Somewhat important	40	35	50	39	38	41	41	41
Not too important	10	6	19	9	7	10	12	11
Don't know	2	2	1	2	0	2	2	2

Californians are equally concerned about U.S. Senate candidates' positions on marine and other environmental issues, with 50 percent of all adults and 48 percent of likely voters saying this is very important. Here again, importance is greater for Democrats (59%) and independents (54%) than for Republicans (30%), and for North Coast residents than others. Women are more likely than men (54% to 46%), and Latinos are more likely than whites (60% to 45%) to say these positions are very important to them.

**"In thinking about the upcoming California U.S. Senate election in 2006, how important to you are the candidates' positions on the environment—including marine and coastal issues?"**

	All Adults	Party			Region			Likely Voters
		Dem	Rep	Ind	North Coast	South Coast	Inland	
Very important	50%	59%	30%	54%	56%	51%	44%	48%
Somewhat important	38	34	46	36	35	37	40	39
Not too important	11	5	21	10	8	10	14	12
Don't know	1	2	3	0	1	2	2	1

Which political party tends to be closer to Californians' views on marine environmental policy? Half of all adults (51%) and likely voters (53%) pick the Democratic Party, while three in 10 adults (28%) and likely voters (29%) choose the GOP. A majority of North Coast (60%) and South Coast (51%) residents favor Democrats on environmental policy, while Inland residents are more divided (39% Republicans, 42% Democrats). Women are somewhat more likely than men (54% to 48%), and Latinos are somewhat more likely than whites (52% to 47%), to pick the Democratic party when asked about this issue.

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## Survey Methodology

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The PPIC Statewide Survey is directed by Mark Baldassare, research director and survey director at the Public Policy Institute of California, with assistance in research and writing from Jennifer Paluch, project manager for this survey, and survey research associates Dean Bonner, Lunna Lopes, and Sonja Petek. The survey was conducted with funding from The David and Lucile Packard Foundation and benefited from discussions with their program staff and grantees, as well as with colleagues at other institutions; however, the survey methods, questions, and content of the report were solely determined by Mark Baldassare.

The findings of this survey are based on a telephone survey of 2,003 California adult residents interviewed between February 8 and February 15, 2006. Interviewing took place on weekday nights and weekend days, using a computer-generated random sample of telephone numbers that ensured that both listed and unlisted telephone numbers were called. All telephone exchanges in California were eligible for calling. Telephone numbers in the survey sample were called up to six times to increase the likelihood of reaching eligible households. Once a household was reached, an adult respondent (age 18 or older) was randomly chosen for interviewing by using the “last birthday method” to avoid biases in age and gender. Each interview took an average of 17 minutes to complete. Interviewing was conducted in English or Spanish. *Accent on Languages* translated the survey into Spanish with assistance from Renatta DeFever. Schulman, Ronca & Bucuvalas, Inc. conducted the telephone interviewing.

We used recent U.S. Census and state figures to compare the demographic characteristics of the survey sample with characteristics of California’s adult population. The survey sample was closely comparable to the census and state figures. The survey data in this report were statistically weighted to account for any demographic differences.

The sampling error for the total sample of 2,003 adults is +/- 2 percent at the 95 percent confidence level. This means that 95 times out of 100, the results will be within 2 percentage points of what they would be if all adults in California were interviewed. The sampling error for subgroups is larger. The sampling error for the 1,510 registered voters is +/- 2.5 percent. The sampling error for the 1,128 likely voters is +/- 3 percent. Sampling error is only one type of error to which surveys are subject. Results may also be affected by factors such as question wording, question order, and survey timing.

In this report, we divide the state into three geographic regions. The “North Coast” region (25% of the state’s population) refers to the counties along the California coast from Del Norte through San Luis Obispo. This region also includes the San Francisco Bay Area counties of Napa, Solano, Contra Costa, Alameda, and Santa Clara. The “South Coast” region (47% of the state’s population) includes Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties. All other counties are included in the “Inland” region (28% of the state’s population).

We present specific results for Latinos because they account for about 30 percent of the state’s adult population and constitute one of the fastest growing voter groups. The sample sizes for African Americans and Asians are not large enough for separate statistical analysis. We do compare the opinions of registered Democrats, Republicans, and independents. The “independents” category includes those who are registered to vote as “decline to state.” We also include the responses of “likely voters”—those who are most likely to vote in the state’s elections.

We compare current survey responses both to responses in earlier PPIC Statewide Surveys, to analyze trends over time in California, and to responses in national surveys conducted by CNN/USA Today/Gallup poll.



**PPIC STATEWIDE SURVEY  
SPECIAL SURVEY ON THE ENVIRONMENT  
FEBRUARY 8- 15, 2006  
2003 CALIFORNIA ADULT RESIDENTS: ENGLISH AND SPANISH  
MARGIN OF ERROR +/-2% AT 95% CONFIDENCE LEVEL FOR TOTAL SAMPLE**

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1. First, overall, do you approve or disapprove of the way that Arnold Schwarzenegger is handling his job as governor of California?

35% approve  
53 disapprove  
12 don't know

2. Do you think things in California are generally going in the right direction or the wrong direction?

32% right direction  
58 wrong direction  
10 don't know

3. Turning to economic conditions in California, do you think that during the next 12 months we will have good times financially or bad times?

42% good times  
45 bad times  
13 don't know

Next, I am going to read you a list of environmental issues in the state. Please tell me if you think each of the following is a big problem, somewhat of a problem, or not a problem in California today.

*[rotate questions 4 to 6]*

4. How about ocean and beach pollution along the California coast?

50% big problem  
35 somewhat of a problem  
10 not a problem  
5 don't know

5. How about air pollution?

58% big problem  
31 somewhat of a problem  
9 not a problem  
2 don't know

6. How about toxic substances contaminating soil and groundwater?

51% big problem  
33 somewhat of a problem  
11 not a problem  
5 don't know

Next, I am interested in your views about ocean and marine life along the California coast.

7. Thinking about the overall health and quality of the ocean for marine life along the California coast today—would you rate it as excellent, good, not so good, or poor?

4% excellent  
36 good  
42 not so good  
13 poor  
5 don't know

8. Over the past 20 years, do you think the overall health and quality of the ocean for marine life along the California coast has gotten better, stayed about the same, or gotten worse?

15% gotten better  
29 stayed about the same  
48 gotten worse  
8 don't know

- 8a. Twenty years from now, do you think the condition of the ocean along the California coast will have gotten better, stayed about the same, or gotten worse than it is today?

25% gotten better  
24 stayed about the same  
45 gotten worse  
6 don't know

9. Thinking about the overall conditions of public beaches along the California coast today—would you rate them as excellent, good, not so good, or poor?

5% excellent  
50 good  
32 not so good  
7 poor  
6 don't know

10. Over the past 20 years, do you think overall conditions of public beaches along the California coast have gotten better, stayed about the same, or gotten worse?

16% gotten better  
45 stayed about the same  
31 gotten worse  
8 don't know



Next, I am going to list some specific problems people say affect our ocean and marine life in California today. After each, please tell me whether you think it is a big problem, somewhat of a problem, or not a problem in the part of California coast that is closest to you.

*[rotate questions 11 to 16]*

11. How about overfishing (depleting the fishing stock) by commercial fishing?

32% big problem  
33 somewhat of a problem  
24 not a problem  
11 don't know

12. How about the contamination of fish and seafood?

44% big problem  
36 somewhat of a problem  
15 not a problem  
5 don't know

13. How about declining numbers of fish and marine life due to recreational activities?

30% big problem  
36 somewhat of a problem  
26 not a problem  
8 don't know

14. How about ocean and beach pollution from streets and storm drains?

52% big problem  
35 somewhat of a problem  
10 not a problem  
3 don't know

15. How about too much growth and development on the coast?

41% big problem  
33 somewhat of a problem  
23 not a problem  
3 don't know

16. How about limited public access to the coast and beaches?

20% big problem  
33 somewhat of a problem  
42 not a problem  
5 don't know

*[rotate questions 17 and 18]*

17. How important is the condition of the ocean and beaches to the quality of life in California—very important, somewhat important, not too important, or not important at all?

70% very important  
24 somewhat important  
4 not too important  
1 not important at all  
1 don't know

18. How important is the condition of the ocean and beaches to the economy in California—very important, somewhat important, not too important, or not important at all?

63% very important  
30 somewhat important  
4 not too important  
1 not important at all  
2 don't know

19. Next, which branch of government do you trust to do a better job in handling marine and coastal issues in California—the federal, the state, or the local government?

*[rotate order top to bottom]*

14% federal government  
36 state government  
36 local government  
1 other (*specify*)  
4 none (*volunteered*)  
1 all (*volunteered*)  
8 don't know

20. Overall, what do you think of the California Coastal Commission when it comes to controls on development—are they too strict, about right, or not strict enough?

10% too strict  
27 about right  
44 not strict enough  
4 never heard of the California Coastal Commission (*volunteered*)  
15 don't know

20a. How about the California State Fish and Game Commission when it comes to controls on commercial and recreational fishing—are they too strict, about right, or not strict enough?

10% too strict  
42 about right  
30 not strict enough  
3 never heard of the California State Fish and Game Commission (*volunteered*)  
15 don't know

21. Changing topics, overall, do you approve or disapprove of the way that George W. Bush is handling his job as President of the United States?

36% approve  
61 disapprove  
3 don't know

22. And do you approve or disapprove of the way that President Bush is handling environmental policy—such as marine and coastal issues—in the United States?

27% approve  
59 disapprove  
14 don't know

23. Overall, do you think that the federal government is doing more than enough, just enough, or not enough to protect the coastal and marine environment in the United States?

5% more than enough  
29 just enough  
60 not enough  
6 don't know

24. Next, do you approve or disapprove of the way that Governor Arnold Schwarzenegger is handling environmental policy—such as marine and coastal issues—in California?

28% approve  
47 disapprove  
25 don't know

25. Overall, do you think that the state government is currently doing more than enough, just enough, or not enough to protect the coastal and marine environment in California?

6% more than enough  
37 just enough  
50 not enough  
7 don't know

25a. In terms of priorities for the state's budget, do you think that funding for marine and coastal protection is very important, somewhat important, or not too important?

48% very important  
42 somewhat important  
8 not too important  
2 don't know

Next, I am going to list some marine and coastal policies that some people have proposed. For each one, please tell me if you favor or oppose taking such an action.

*[rotate questions 26 to 26a]*

26. How about allowing more oil drilling off the California coast?

31% favor  
64 oppose  
5 don't know

26a. How about building desalination plants on the California coast?

*[if asked: desalination is the process of turning ocean water into fresh water]*

56% favor  
33 oppose  
11 don't know

*[rotate questions 27 to 29a]*

27. How about reducing ocean and beach pollution from streets and storm drains, even if this means paying higher fees or taxes?

71% favor  
25 oppose  
4 don't know

28. How about restricting the private development of land along the California coast, even if this means there will be less housing available near the ocean and beaches?

67% favor  
29 oppose  
4 don't know

29. How about creating more marine reserves off the California coast, even if this means that some ocean areas will be off-limits to commercial and recreational fishing?

71% favor  
23 oppose  
6 don't know

29a. How about protecting the wetlands and habitats near the bays and beaches, even if this means there will be less commercial and recreational activity near the California coast?

75% favor  
21 oppose  
4 don't know

30. Next, Marine Protected Areas, or M-P-As are created and managed by the California State Fish and Game Commission to protect fish, wildlife, and their habitat in coastal waters within three miles from shore. Do you think it is a good idea or a bad idea to create new Marine Protected Areas in about 10 to 20 percent of the ocean waters along California's coast?

75% good idea  
17 bad idea  
8 don't know

31. Do you favor or oppose a guest tax on coastal hotel rooms to fund the enforcing, monitoring, and evaluation of Marine Protected Areas?
- 59% favor
  - 36 oppose
  - 5 don't know
32. Next, in thinking about the upcoming California governor's election in 2006, how important to you are the candidates' positions on the environment—including marine and coastal issues—very important, somewhat important, or not too important?
- 48% very important
  - 40 somewhat important
  - 10 not too important
  - 2 don't know
33. In thinking about the upcoming California U.S. Senate election in 2006, how important to you are the candidates' positions on the environment—including marine and coastal issues—very important, somewhat important, or not too important?
- 50% very important
  - 38 somewhat important
  - 11 not too important
  - 1 don't know
34. Which political party tends to be closer to your own views on environmental policy—such as marine and coastal issues [*rotate*] the Republican Party or the Democratic Party?
- 28% Republican Party
  - 51 Democratic Party
  - 8 other answer (*volunteered*)
  - 13 don't know
35. Next, how important is the condition of the ocean and beaches in California to you personally—is it very important, somewhat important, not too important, or not important at all?
- 61% very important
  - 30 somewhat important
  - 6 not too important
  - 2 not important at all
  - 1 don't know
36. How often would you say you visit a beach on the California coast for any purpose—once a week, once a month, several times a year, once a year, less than once a year, or never?
- 17% once a week
  - 16 once a month
  - 42 several times a year
  - 12 once a year
  - 8 less than once a year
  - 5 never
37. In the past twelve months, have you gone swimming, surfing, snorkeling, or scuba diving in the ocean or the bays of the California coast?
- 36% yes
  - 64 no
38. In the past twelve months, have you gone sailing, kayaking, motor boating or fishing on the ocean or the bays of the California coast?
- 26% yes
  - 74 no
39. And in the past few years, have you visited an aquarium or other educational facility about marine life?
- 72% yes
  - 28 no
40. And in the past few years, have you visited a marine preserve or public beach to observe tide pools and ocean life?
- 57% yes
  - 43 no
41. How often would you say you eat fish or seafood at home or in a restaurant—several times a week, about once a week, sometimes, rarely, or never?
- 22% several times a week
  - 34 about once a week
  - 28 sometimes
  - 11 rarely
  - 5 never
42. How important would you say that eating fish or seafood is to your having a healthy diet—very important, somewhat important, not too important, or not at all important?
- 54% very important
  - 32 somewhat important
  - 9 not too important
  - 5 not at all important

43. How concerned are you that the fish or seafood for sale have contaminants such as mercury—very concerned, somewhat concerned, not too concerned, or not at all concerned?

64% very concerned  
22 somewhat concerned  
9 not too concerned  
4 not at all concerned  
1 don't know

44. How concerned are you that the fish or seafood for sale are commercially overfished—very concerned, somewhat concerned, not too concerned, or not at all concerned?

46% very concerned  
36 somewhat concerned  
11 not too concerned  
5 not at all concerned  
2 don't know

45. How much do you feel you know about marine and coastal issues in California today—a lot, some, or not much?

12% a lot  
49 some  
37 not much  
2 nothing (*volunteered*)

46. How interested are you in learning more about marine and coastal issues in California today—very interested, somewhat interested, or not too interested?

25% very interested  
54 somewhat interested  
20 not too interested  
1 not at all interested (*volunteered*)

47. Next, some people are registered to vote and others are not. Are you absolutely certain that you are registered to vote?

76% yes  
23 no  
1 don't know

48a. Are you registered as a Democrat, a Republican, another party or as an independent?

43% Democrat [*skip to q50*]  
35 Republican [*skip to q50*]  
4 another party (*specify*) [*skip to q50*]  
18 independent

49a. Do you think of yourself as closer to the Republican Party or Democratic Party?

28% Republican party  
43 Democratic party  
20 neither (*volunteered*)  
9 don't know

50. Next, would you consider yourself to be politically:

9% very liberal  
21 somewhat liberal  
33 middle-of-the-road  
25 somewhat conservative  
10 very conservative  
2 don't know

51. Generally speaking, how much interest would you say you have in politics—a great deal, a fair amount, only a little, or none?

27% great deal  
39 fair amount  
26 only a little  
7 none  
1 don't know

52. How often would you say you vote—always, nearly always, part of the time, seldom, or never?

55% always  
15 nearly always  
8 part of the time  
5 seldom  
17 never

[questions D1-D11: demographic questions]

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